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Table of content

Bulent Acma

Strategies for a Regional Innovative Knowledge Society: the Southeastern Anatolia Region and the Southeastern Anatolia Project(GAP) in Turkey As a Case Study

Abstract:

Innovation and knowledge are fundamental to the economic development, growth, and future competitiveness of our Regions. Central to strategies of enabling this must be partnership and networking, both local and global public and private, with action leading to a solid foundation for innovation. As competition is the ultimate driver of innovation, this calls for more entrepreneurial dynamism and greater mobility of knowledge based on an effective use of Information and Communication Technology (ICT) to enable increased interconnectivity between knowledge workers through virtual networking. In a Knowledge Society it is humans and human capital, their vision and abilities, which are most important to the positive development of our regions, rather than the predominant physical resources and issues of the past. Empowering our people to apply their intelligence, experience and imagination to leverage data and information into a Knowledge Society, requires dynamic regional leadership, a can do attitude and a holistic approach to regional development. A Regional Innovative Knowledge Society requires alternate nodes of development in various local contexts and new mechanisms such as awareness creation, access to telecommunications, education/training, finance, academic/industrial interactions and sectoral networks. This process is recognised at European level and is already happening at local level, as illustrated in Turkiyes Southeastern Anatolia Region and elsewhere. In the first section of this study, economic innovations depending on knowledge will be presented. In the second section the efforts of Europe Union about innovations will be investigated. In the third section strategies for regional innovation knowledge society will be examined. In the last section the strategies for converting the Southeastern Anatolia Region into an innovative knowledge society will be analyzed.

Cenk Gokce Adas

The Effect of Interest Rate on the Conventional and Participation Banks in Turkey

Abstract:
It is assume that participation banks which are based on interest free banking will not be affected by the fluctuation of interest rates, and that's why participation banking may become financially more stable compared to conventional banks. In this paper we study the effect of interest rate shock on the deposits and loans held by conventional and participation banks in Turkey. For this reason, we implement the Vector Error Correction (VEC) methodology in order to expose if Participation banks affected by the changes in interest rates by employing of monthly data from 2006:01 to 2012:10 period. The empirical findings of the models result that interest rates have the effect on deposits and loans of conventional banks as well as Participation banks.

JEL Classification: G21; E52

Keywords: Participation Bank; Islamic Bank; Interest-free Banking.

Lamya Al Abdulkarim

Standardization of Evaluation in Health

Abstract:
Standardized evaluation and scales are needed in the health professions for evidence based practice. In the field of speech pathology, there is no standardized evaluation for Arabic speaking pediatric patients with communication disorders. This paper presents the development of the first diagnostic test in the world designed to clinically evaluate children´s receptive and expressive language disorders in Arabic. The research data also supplies developmental milestones for Arabic speaking children. The outcome measurement provides data that present a child´s language developmental or disordered profile which guides the development of effective treatment plans. The development of standardized tests takes multiple phases starting with reviewing relevant literature, the design of the items, and the try out phases to modify the design for validity and reliability. This paper presents the design and first try out data of the standardization of the first diagnostic evaluation of language disorders in Arabic speaking children. Sixty children have been tested during the first try out. Results showed that different age groups have different trends in the development of Arabic language rules. The outcome has a vast and well needed applications at the hospital clinics, rehabilitation centers, private clinics, schools as well as research. The paper concludes with step by step know-how of how to develop a diagnostic evaluation for any language.

Abdulaziz Aldegheishem

Evaluation of Kinf Saud University Master Planning Experiment: Lesson to be Learned

Abstract:
King Saud University (KSU) is considered the oldest university in the Kingdom of Saudi Arabia. The area of its Campus is about 9 km². Since the 1980s, when the first Master Plan (MP) was completed, it has out grown the planned capacity to a total of over 40,000 students and over 5000 faculty and staff members. In (2009), therefore, KSU decided to update campus Master Plan (MP). That is to position the University to realize its strategic vision for the future.
During the last decade (KSU) has made many inputs on the campus such as constructing new buildings and roads to meet the increasing numbers of students and staff. This experiment has faced many problems and challenges, though many obstacles were overcome, from which several lessons can be learned by other universities. This paper examines the new master plan with the period between the two master plans and draws the lessons which can be learned.

Keywords: Planning, Master Plan, University

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Nasser A. Al Faleh

Effective Teaching Practices in Higher Education in Saudi Arabia

Abstract:
This study aimed to investigate the Faculty members' attitude toward the practices of effective teaching in King Saud University and to know the differences between the averages mean scores of faculty members' responses with respect to the variables of study. To know this, the researcher put the following questions:

1. To what extent the faculty members of King Saud university are practicing the effective teaching?
2. Are there any significant differences between the average mean scores of faculty members responses attributed to the experience (1-10 years – more than 10 years)?
3. Are there any significant differences between the average mean scores of faculty members responses attributed to the gender (Male – Female)?
4. Are there any significant differences between the average mean scores of faculty members responses attributed to the academic rank (Professor – Associate Professor – Assistant Professor)?
5. Are there any significant differences between the average mean scores of faculty members responses attributed to the major (Science Major – Non-Science Major)?

To achieve the objectives of the study, a questionnaire of (28) items distributed to a random sample of (22) faculty members from King Saud University in Saudi Arabia. The results showed the following:

1. (23) Items got more than (4) , and the upper limit of the average mean is 5, that's mean the faculty members attitudes effective teaching practices are positive.
2. There are no significant differences between the means scores of faculty member's responses according to the experience (1-10 years – more than 10 years).
3. There are no significant differences between the means scores of faculty member's responses according to the gender (Male – Female).
4. There are no significant differences between the means scores of faculty member's responses according to the major (Science Major – Non-Science Major).
5. There are no significant differences between the means scores of faculty member's responses according to the academic rank (Professor – Associate Professor – Assistant Professor).

Future research studies and recommendations arising from this study were made. The study includes references.

Key Words: Teaching – Practices – Effective – Faculty Members – Attitude – Higher Education.

Introduction:

The idea of effective teacher for each individual is variable. Students´ perception,

Opinions and/or experiences about an effective teacher are different. An effective teacher has been considered, sometimes, as a perfectionist, encouraging, approachable and caring, other times as intelligent, but above all, as enthusiastic, funny, clever, affective and understanding, open, and with a relaxed style while teaching.

The need for integration of the sustainability agenda in education has led to the development of several new courses and revision of existing curriculum. Research has also been initiated in an attempt to provide answers to the question of what constitutes a sustainable design education. Most academics will agree that education is not just about acquisition of knowledge, but the ability to apply that knowledge in the work place and ideally throughout all aspects of life.

An effective teaching-learning process is dependent on a partnership between faculty and students. This partnership is predicated on both parties having something to "bring to the table" and each party recognizing the value of the other's contributions.

Educational literature has defined a variety of teaching and learning styles. Different terminology and criteria for determining specific approaches to teaching have been published. Effective teaching is evaluated by several factors--mainly, quality of instruction and test scores. These are both important but are not the sole indicators of what has been taught and retained in a given school year. Effective teaching is the result of much organization and preparation by teachers who views their job as being an advocate for their students in the academic and social education process.

According to Gibbs (2002) "Teachers need to be able to survive the demands, threats and challenges within the diverse circumstances of teaching" He stated that an effective teacher needs the capacity to be persistent, flexible, and innovative on new teaching approaches and be prepared in the case of failure. Virtually everyone would agree that effective teaching is extremely important, not just for individual but for a society as a whole. There are many theories of effective teaching, and they can be highly complex. However, there are a few areas where most theories find common ground. Three basic features for effective teaching are summarized by education scholar "Chris Kyriacou , 2009" as attentiveness, receptiveness and appropriateness. Nearly all theories of effective teaching have these three ingredients in common. Attentiveness is preparing students to learn, making them excited about the process. Receptiveness is making the actual content of learning interesting and close to their interests. Appropriateness is the nature of the material and its closeness to students' present abilities and cognitive capacity. Therefore, this paper presents the effective teaching practices from the faculty members' points of view.

Statement of Problem:

Effective teaching results in student learning. Ensuring that all students learn is the most important aspect of teaching, but effective teaching ensures that learning is purposeful and deliberate. Teachers must know what students need to learn, how to best teach it and how to tell if they have learned it.

So the problem of the study can be formulated in the following question:

To what extent the faculty members of King Saud university are practicing the effective teaching ?

Significance of Study:

The significance of this study is to investigate the effective teaching practices from faculty members point of view. Throughout this study, the teacher's perspective regarding effective teaching practices was observed and analyzed.

Objectives of the study:
1. Investigating the Faculty members' attitude toward the effective teaching practices in King Saud University.
2. Knowing the differences between the average mean scores of faculty members' responses with respect to the variables of study.

Study questions:
1. To what extent the faculty members of King Saud university practicing the effective teaching ?
2. Are there any significant differences between the average mean scores of faculty members responses attributed to the experience (1-10 years – more than 10 years) ?
3. Are there any significant differences between the average mean scores of faculty members responses attributed to the gender (Male – Female)?
4. Are there any significant differences between the average mean scores of faculty members responses attributed to the academic rank (Professor – Associate Professor – Assistant Professor)?
5. Are there any significant differences between the average mean scores of faculty members responses attributed to the major (Science Major – Non-Science Major)?

Hypotheses of the study:

The study hypotheses were formulated for (4) questions:

1.There are no statistically significant differences between the average mean scores of faculty members' responses with regard to the experience (1-10 years – more than 10 years).

2- There are no statistically significant differences between the average mean scores of faculty members responses attributed to the gender (Male – Female).

3- There are no statistically significant differences the average mean scores of faculty members responses attributed to the academic rank (Professor – Associate Professor – Assistant Professor).

4- There are no significant differences between the average mean scores of faculty members responses attributed to the major (Science Major – Non-Science Major).

Limitations of the Study:

This study determined the following matters:

1- The questionnaire of the study included (28) items about the effective teaching practices.

2- Faculty members in King Saud University.

Previous studies:

Elton (1998):

All excellent teachers are competent teachers, but being competent or qualified to teach is not the same as being an excellent teacher.

Allington (2002) notes that "effective teachers manage to produce better achievement regardless of which curriculum materials, pedagogical approach, or reading program they use" (p.740).

Kreber (2002):

Excellent teachers, regardless of discipline, "know how to motivate their students, how to convey concepts, and how to help students overcome difficulty in their learning."

Brookfield (2006):

Students prefer teachers who are credible (have something sailent to offer them) and authentic (genuinely caring and trustworthy persons who are interested in helping students learn whatever that subject matter might be).

Carpenter (2006) has done an exploratory study to identify effective teaching methods in an environment of a large class. Along with it if there is an identification of the student

perception of these methods by using student learning outcomes as the criteria for effectiveness. Commonly-used teaching methods according to study are: Lecture format, lecture/discussion combination, jigsaw method, case study method and team project.

Poushali Ganguly (2008) proposed different strategies in order to improve the teaching methodologies. According to him teacher should made goals for himself as well as for students so that students can exert efforts towards those goals in order to achieve them. Teachers should evaluate the performance of students towards achieving those goals. Teachers should create the extractive environment in the class & also underline line the main concept of the lesson so that student can easily pick & indentify & memorize them.

The main findings of **(Fabrice Henard , 2009)** study are:

1/Teaching matters in higher education institutions. Although quality teaching encompasses definitions and conceptions that are highly varied and in constant flux, the initiatives (actions, strategies, policies) aimed at improving the quality of teaching are spreading within the institutions.

2/The vast majority of the initiatives supporting teaching quality are empirical and address the institutions' particular needs at a given point in time. Initiatives inspired by academic literature and research on the subject are rare.

3/Technology has allowed quality teaching to expand as beneficial in pedagogy improvement and student-teacher interactions.

John Brennan et al (2009):

Although contexts for learning differ in an increasingly diverse higher education system, there are important commonalities in the outcomes of learning. Universities need to understand and take account of a range of student orientations and types of engagement. Current policy priorities on knowledge, skills and employability may not be in tune with the priorities of many students.

Smith & Roth (2009):

Excellent teachers are more than merely experts within their respective academic domains being knowledgeable about an academic discipline does not guarantee that one could be even a competent, let alone an excellent, teacher.

According to **(Karen Hollowell, 2012)** , Effective teaching is evaluated by several factors--mainly, quality of instruction and test scores. These are both important but are not the sole indicators of what has been taught and retained in a given school year. Effective teaching is the result of much organization and preparation by teachers who views their job as being an advocate for their students in the academic and social education process.

Methodology:

The study sample:

The study sample consisted of (22) faculty members from King Saud University. Questionnaires (which constructed by Buskist , 2012 and used by permission). Questionnaires have been distributed and collected , the sample has been selected randomly. In table (1, 2,3,4)

Table (1): Experience

Experience	Frequency	Percent
1-10 years	11	50.0
More than 10 years	10	45.5
Total	21	95.5

Table (2): Academic Rank

Academic Rank	Frequency	Percent
Professor	4	18.2
Associate Professor	5	22.7
Assistant Professor	13	59.1
Total	22	100.0

Table (3): Gender

Gender	Frequency	Percent
Male	17	77.3
Female	5	22.7
Total	22	100.0

Table (4): Major

Major	Frequency	Percent
Science	12	54.5
Non-science	10	45.5
Total	22	100.0

Validity:
The questionnaire was validated by (Buskist , 2012).

Reliability:
The reliability had been calculated by using Cronbach's alpha and the value was .945 which indicates that it can be used for the study.

Statistical treatment:
The use of statistical methods as the following:
- Calculation of Cronbach's alpha
- For binary variables: Mann-Whitney test was used to test the significant differences between the average mean scores of faculty member's responses
- For Triple variables: Kruskal-Wallis Test was used to test the significant differences between the average mean scores of faculty member's responses

Results of the study and discussion:

The First Question: To what extent the faculty members of King Saud university are practicing the effective teaching?
To answer this question, the average mean scores were used for analysis the information. The analysis are shown in table No. (5).

Table No: (5) shows the mean scores for the responses of faculty members:

Statement	N	Mean
1	22	4.50
2	22	4.41
3	22	4.41
4	22	4.36
5	22	4.36
6	22	4.33
7	22	4.23

8	22	4.23
9	22	4.23
10	22	4.23
11	22	4.18
12	22	4.18
13	22	4.18
14	22	4.18
15	22	4.18
16	22	4.14
17	22	4.09
18	22	4.09
19	22	4.09
20	22	4.09
21	22	4.05
22	22	4.05
23	22	4.00
24	22	3.95
25	22	3.95
26	22	3.91
27	22	3.77
28	22	3.45

by viewing **table No. 5** and arranging the items by the most important with regard to the average mean scores, we can see that (23) items got more than (4), and the upper limit of the average mean is (5) which means that the faculty members attitude toward the effective teaching practices are positive.

The Second Question: Are there any significant differences between the average mean scores of faculty members responses attributed to the experience (1-10 years – more than 10 years) ?

Table No.6

Experience	N	Mean	Mann-Whitney	Significance
1-10 years	11	11.14		
More than 10 years	10	10.85	53.50	.916

Table No. 6 shows that there are no significant differences between the means scores of faculty members attitude toward the effective teaching practices according to experience.

The Third Question: Are there any significant differences between the average mean scores of faculty members responses attributed to the gender (Male – Female)?

Table No.7

Gender	N	Mean	Mann-Whitney	Significance
Male	17	10.56		
Female	5	14.70	26.5	.209

Table No.7 shows that there are no significant differences between the means scores of faculty members attitude toward the effective teaching practices according to gender.

The Fourth Question: Are there any significant differences between the average mean scores of faculty members responses attributed to the academic rank (Professor – Associate Professor – Assistant Professor)?

Table No. 8

Academic Rank	N	Mean	Kruskal-Wallis	Significance
Professor	4	10.25		
Associate Professor	5	12.30	.227	.893
Assistant Professor	13	11.58		

Table No.8 shows that there are no significant differences between the means scores of faculty members attitude toward the effective teaching practices according to the Academic Rank.

The Fifth Question: Are there any significant differences between the average mean scores of faculty members responses attributed to the major (Science Major – Non-Science Major)?
Table No. 9

Major	N	Mean	Mann-Whitney	Significance
Science Major	12	10.50		
Non-Science Major	10	12.70	48	.427

Table No.9 shows that there are no significant differences between the means scores of faculty members attitude toward the effective teaching practices according to the major.

The study summary and recommendations**:**
This study aimed to investigate the Faculty members' attitude toward the effective teaching practices in King Saud University and to know the differences between the average mean scores of faculty members' responses with respect to the variables of study. To know this, the researcher put the following questions:
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4. There are no significant differences between the means scores of faculty members responses according to the major (Science Major – Non-Science Major).
5. There are no significant differences between the means scores of faculty members responses according to the academic rank (Professor – Associate Professor – Assistant Professor).

Recommendations:

Based on the results of the study, the researcher recommends the following:

1. Teachers must know what students need to learn, how to best teach it and how to tell if they have learned it.
2. A teacher needs a way to determine if his students have met a lesson's goal. This is the assessment. An assessment is a way for students to demonstrate that they have gained whatever particular knowledge a teacher intended them to learn.
3. The main function of theorizing about effective teaching is to provide a framework to make learning easier and teaching more rewarding.
4. One of the most important factors in effective teaching is getting students motivated to learn. Teachers may provide incentives for students who do well and disincentives for those who don't try.

Proposed Studies:

- Conducting a study about the importance of effective teaching.
- Conducting a study about the characteristics of effective teachers.

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Nawal Alghamdi

Counsellor's Role in Saudi Arabia Girls' Schools as Perceived by Teachers

Abstract:
Research has demonstrated the value of closer teacher-counsellor partnerships as the two groups collaborate to foster children's educational development and achievement. However, professional training and cooperation from teachers are inadequate, concerns remain that the role of school counsellors is unclear. Consequently, unrealistic expectations that teachers have about counsellors roles may hinder rather than advance school counselling programmes The aim of this study was to determine the perceptions of teachers concerning the actual and ideal role of intermediate girls' school counsellors in Saudi Arabia. The study further aimed to identify the problems that face counsellors in offering a good service. Information was collected from a questionnaire survey, complemented by semi-structured interviews. The data were analyzed using the Statistical Package for the Social Sciences (SPSS) programme. The findings point to numerous differences among teachers regarding counsellor's role which suggest role conflict and ambiguity surrounding the counsellor's role. Finally, recommendations are offered for improving the quality of counselling services in Saudi schools including a requirement for improved training for counsellors, and increased awareness among all those concerned, especially, teachers and parents.

Hasan Alghonaiman

Learning a Second language: The Importance and methods

Abstract:

Learning a Second language: The Importance and methods The Importance of learning a Second language: The importance of second language learning lies in that people who learn a language may gain knowledge and new education. The importance of learning a second language increases if the learned language is an international language such as English or French. Learning stems from teaching methods, books, teachers, students, and so on. First: Second language learning methods: The most important way is to induce learner motivation. They could either be short motivations such as graduation or obtaining a job, to longer ones such as living and communicating in a country that speaks a different language. When learning skills, it is better to begin from the easiest facet, and then move to more difficult ones. The best language teaching method are the structural methods which are begun by learning sounds , letters, words , phrases, and then style . 1- Teaching sounds : When teaching language sounds, it's better to be conducted by an instructor from a native language speaking person because he is able to pronounce the language sounds in a correct and appropriate way. 2- Teaching Vocabulary When teaching vocabulary, abide by the following: ʖ Choose vocabulary compliant with the mother tongue. ʖ Choose used and common vocabulary. For example : the word " Go" instead of " travel" ʖ Learn through the following means : A- Synonym : teacher , instructor B- Opposite : near , far C- Semantics: choose certain field such as vegetables, means, knowledge, such as books, and newspapers. D- At last choose the abnormal words. 3- Learn methods In learning styles we have to avoid translation, hence each language has its own inclusiveness. Second: Teacher: The teacher of the second language must be of those whom the language is the mother tongue. Third: The book: The book has importance in the learning process. Fourth: Student: Successful language learning is the key approach to acquiring language. Teachers may create language environments so that student can acquire the second language better. We must also concern ourselves with other activities such as student cultural activities. In addition, assisting students to get rid of bad feelings or non ability to learn is appropriate. Furthermore, it's better to create mutual relations with students to increase learning chances. Finally, we must encourage self learning for its importance in the learning process.

Ibrahim Al Humaidan

An Analytical Study of The Content of Teaching Plans for Social Studies, Teachers at Secondary School in Riyadh

Abstract:

Teaching plans continued for many years via formal teaching as main guide for instructional conduct inside teaching room or outside it. This inherited culture towards teaching plans make it possesses the great portion of care of educational, practical items like; educational observer, and school manager. They work as an easy machinery of government to evaluate instructional conduct of the teacher. That study aims at analyzing teaching plans analysis of social studies teachers in secondary stage in Riyadh, in order to make sure of their harmony with good model of teaching planning. In this study, the researcher uses research methods through analysis of teaching plans of teachers, and hence evaluate the availability of good teaching plan procedures. As for study society, it consists of all social studies teachers who teach social studies curriculum in secondary stage in Riyadh city. As for study sample, it was selected in an aciniform manner via selection schools, them selection instructors, where first, they will choose what is about 10 % of total Riyadh city schools in governmental secondary schools randomly. That sample is the axiom one of study , after which they select social studies instructors who teach social studies in these schools. As, for study tool, it is an analysis tool by the researcher design that includes a group of elements that are as the main components of any teaching planning process.

Ahmed Almohaimeed

Volatility spillover effects between oil prices and GCC stock market index under structural breaks

Abstract:

This study investigate the volatility spillover effects between oil prices and GCC stock market index under structural breaks. A large of important papers have examined the volatility spilover effect between oil prices and major stock market (e.g. see Jones and Kaul (1997), Sadorsky (1999), Park and Ratti (2008and Apergis and Miller (2009) and conclude evidence of stock market reactions to oil prices changes. A related line of research have examined the exitence of spiliover effects between oil prices and GCC stock market index (e.g. see Hammoudeh and Choi (2006), Malik and Hammoudeh (2007), Lescaroux and Mignon (2008), Arouri et al. (2011), Arouri et al. (2012). Their resualts indicate that oil prices fluctuations affect the GCC stock market index, while only in the case of Saudi Arabia there is evidence of a volatility spillover effects from the stock market index to the oil prices (Malik and Hammoudeh (2007)). However, it's surprising that the most of empirical studies have ignored the presence of structural breaks in conditional volatility (i.e. volatility shifts). Indeed, ignoring structural breaks in conditional volatility may lead to wrong results about the degree of spillover effects and volatility persistence. The major objectives of this study is to examine the volatility spillover effects between oil prices and GCC stock market index incorporating the structural breaks in conditional volatility. The multivariate GARCH model (MGARCH) is extended by taking account of the structural breaks in order to capture the own and cross volatility spillover effects. The volatility shifts are identified by using iterated cumulative sums of squares (ICSS) algorithms proposed by Inclan and Tiao (1994) and modified ICSS algorithms such Kappa-1 (k-1) and Kappa-2 (k-2) developed by Sanso et al. (2004). The estimated results based on VAR(1)-MGARCH(1,1) model and daily data from stock market data indicate that the inclusion of structural breaks in the model substantially reduces volatility persistence and the estimated of half-life of shocks changes dramatically. Concerning the volatility spillover effects, the results show that both oil prices and stock market index is affected by news and volatility in its own market. In addition, we find that the own news and volatility impact are smaller in size when we include structural breaks. In addition, we find that stock market is directly affected by news and volatility from the oil market, while the volatility of oil prices is indirectly affected by stock market (Expected results). Otherwise, the estimated result can be used by investor and financial market participants for making optimal portfolio decisions and risk management. It is interesting to find that the model ignoring structural breaks gives an optimal weight smaller than the model that incorporates structural breaks. In addition, we found that the estimated value of risk minimizing hedge ratio for the model without structural breaks is small compared to hedge ratio obtained from the model with structural breaks (Expected results). Our result shows the importance of model choice in term of optimal portfolio decision and risk management. Finally, we find that the structural break in conditional volatility should not be ignored in modeling volatility.

Musaad Almosaind

Traffic Conditions in Emerging University Campuses: King Saud University, Riyadh, Saudi Arabia

Abstract:

Traffic Conditions in Emerging University Campuses: King Saud University, Riyadh, Saudi Arabia King Saud University (KSU) is the largest, most prominent university in the Middle East. Its main campus is the home of more than 34000 students, 12000 faculty and staff employees and a big university hospital. Housing complexes within the campus is occupied by 1100 families and nearly 5000 single students. The total campus area is 900 hectares whereas built up area is nearly 15 percent. Three years ago, KSU has launched an ambitious Strategic Plan that calls for a new university rule to become a world class university. The plan emphasized a major shift of future KSU from a strong educational institution to a balanced emphasis on research and educational activities. That shift has resulted in an ambitious construction projects for major facilities (educational, research, medical, and housing) with a total cost of nearly $4 billion. These projects are due for completion in three years. In an auto-dependent city such as Riyadh, Saudi Arabia, increased traffic volumes are becoming an acute challenge to transportation specialists. Due to rapid growth and changing university development patterns, traffic conditions within and around KSU campus are deteriorating quickly. Congestion has become a daily experience of most campus users and visitors. This paper addresses traffic conditions within KSU campus. It starts with analyzing traffic volumes and conditions during the last decade and how existing road system within the campus is coping with it. The potential traffic impacts of major university projects due for completion soon are analyzed. It concludes with suggestion and recommendations to alleviate potential traffic congestion and manage traffic within and around the campus in the short and long term.

Saeed Almuharrami

Interest rate in Oman: Determinantes of Financial Intermediation Costs

Abstract:
This paper examines the determinants of the interest margin in Oman by decomposing it into its profit and cost components, including reserve requirement costs, operational costs, and provision for loan losses. The net interest margin, measured as a difference between lending and deposit rates, is a commonly accepted measure of bank intermediation costs. The importance of the bank interest margin as a measure of financial intermediation costs is particularly pronounced in emerging economies, including Oman, where corporations are largely dependent on bank financing as a source of external funding. The interest margin decomposition is based on the methodology proposed in Randall (1998) . To decompose the interest rate margin, the researcher use quarterly data on consolidated balance sheets and income statements of six major Omani banks for the period 2006-10. Several conclusions can be drawn from the results. First, the implicit interest margin is relatively small (in the neighborhood of 1-1.5 percentage points). Second, profits constitute a substantial proportion of the margin. However, the share of profits has been declining over time, especially following the global financial crisis. Interestingly, bank profitability decreased and the margin slightly rose following the increase in loan-loss provisioning in 2009-10. Fourth, the share of operating costs in the margin has been broadly constant over time. Fifth, reserve requirement costs have been reduced following the decline of the reserve requirement ratio from 8 to 5 percent of deposits in the first half of 2009.

Serpil Aytac

Mustafa Aytac

Job Satisfaction And Loneliness: A Study From Turkey

Abstract:
Loneliness is often assumed to be an occupational hazard for members of an organization. Loneliness is not the state when individuals want to be alone, but is an unfavourable state involving a low level of social relationships, feelings of high levels of stress and low life/job satisfaction.

The purpose of this study was to investigate loneliness in the workplace. The notion of loneliness in the workplace was explored, with particular emphasis on examining the antecedents and outcomes of its development in work contexts. Different scales were used in the study to measure work-related loneliness and job satisfaction. All the scales were constructed and tested for reliability and factor structure on prison staff from prison in the city of Bursa, Turkey.

The research is a relational survey model. The results indicated that the experience of work-related loneliness has an overall negative effect on job satisfaction. The findings from this study offer insights into possible areas for organizational intervention and future research.

Keywords: Loneliness at Work, Prison Staff, Prison Officers, Job Satisfaction, Job Related Affective Well-being

Introduction:
Job satisfaction plays a key role in the physical and psychological well-being of employees and is a crucial factor in labor markets.

Lawler et al (1971), defined job satisfaction as a person's affective reactions to his total work role. Oshagbemi (2000) referred to job satisfaction as an individual's positive emotional reactions to a particular job. Mueller; & McCloskey (1990) defined job satisfaction as an affective feeling that depends on the interaction of employees, their personal characteristics, values and expectations with the work environment and the organization. job satisfaction is a subjective, positive feeling or emotional state that a person perceives based on a variety of facets of the work itself and the work environment (Hackman et al. 1983).

On the other hand, people are social entities and from this aspect, they have a need to form meaningful and healthy relationships with other people. If an individual cannot form healthy and fulfilling relationships with those around him, he will experience stress and dissatisfaction and feel lonely.

In work life, the persons expectations are not met, frustrations and their own personality can lead to live in loneliness. In daily life, an individual who has relationships which are quite hearty and healthy and who does not live in loneliness, establish social relationships in the business environment and may experience difficulties in obtaining social support (Mercan et al.,2012). This situation can lead to an individual's live in loneliness in working life. Loneliness at work is different from normal loneliness. It's a loneliness that just occur in business life.

Sullivan (1953) conceptualized loneliness as not sufficiently removing the need to establish intimacy with others which mostly results in an unwanted, uncomfortable life (Koçak, 2008). Loneliness is not only a problem outside work, but is also a physically, socially and psychologically discomforting feeling for people in the workplace. In a general sense, loneliness is an emotional state created by weak social interaction and personal relationships (Ernst and Cacioppo, 1999). Loneliness in the workplace is expressed as remaining alone, isolation and the feeling of being alone, originating from several social environments (Wright et al 2006).

According to Ernst and Cacioppo (1999), loneliness has been 'associated with a variety of individual differences including depression, hostility, pessimism, social withdrawal, alienation, shyness and a low positive effect.' It is also 'a concomitant of more severe disorders such as clinical depression, borderline personality disorder, and schizophrenia' (Ernst and Cacioppo 1999).

Weiss (1973) first described the multidimensional nature of loneliness by proposing two distinct types: the experience of emotional isolation (**emotional loneliness**) and social isolation (**social loneliness**). Emotional loneliness is the absence of a close emotional relationship. Social loneliness is the lack of integration into a social network. Social Loneliness-This includes friendships and workplace relationships. A perceived lack of these types of relationships would be reflected in feelings of social loneliness.

Several studies have been carried out on the subject of loneliness. Some studies have determined a relationship between feelings of loneliness experienced at work and several factors such as anxiety, anger, over-sensitivity, depression, shyness, negative self-perception and lack of social skills. In addition, loneliness has been defined as a life associated with unwanted negative emotions such as revenge, sadness and stress and in related studies there has been emphasis on the positive correlation between workload, perceived work stress, depression and anxiety (Peplau et al., 1982: Wiseman et al, 1995). On the other hand, a negative correlation was found between loneliness in the workplace and job satisfaction and organisational attachment (Wright, 2005). Literature on occupational stress also touches on isolation and loneliness as both a cause and a consequence of stress at work. (Wright, 2005, Cooper et al.,2003).

Cohen (2004) emphasized the positive effects of social relationships on an individual's health and highlighted the importance of relationship structures in the social area for physical health and a sense of well-being. Cacioppo et al (2002) reported that loneliness and social exclusion are indicators of social relationships. Kafetsios (2002) reported that loneliness in social environments originates from lack of social communication, or mutual interest and from not being in a group taking part in activities (Weiss, 1973, Yılmaz, 2010).

This study aimed to examine the effects of perceived feelings of loneliness at work on job satisfaction and emotional status of prison officers working in prisons. In this study we used a Questionnaire survey.

Methodology

Procedure and Participants: Participants were recruited from a prison in Bursa, Turkey. The prepared questionnaire was firstly pre-tested on a selected group of 30 participants in a prison. Any items which were incomprehensible to the participants or of low reliability were removed and the questionnaire was revised to finally consist of 49 items in total. The questionnaire was applied to all the employees in groups during a 3-week period with the help of the prison psychologist.. The participants in this study were 159 prison officers in a city prison for male offenders in a city Bursa-Turkey. Complete enumeration method was used in this study.

Instruments: The dimensions in the questionnaire and the measurement scales are as follows:

1.   Loneliness at Work Scale. **(LAWS)** Loneliness was measured using Wright, Burt, and Strongman's (2006) 16-item scale. It has two factors. The items described emotional deprivation (ED) and lack of social companionship (LSC) at work. This scale was tested for validity and reliability by Doğan et al. (2009).

2.   Job-related Affective Well-being Scale, (JAWS) To measure the employees' perceptions of their Jobs well being, Job-related Affective Well-being Scale (JAWS) was used. This Scale was developed by Van Katwyk, Fox, Spector, & Kelloway (2000) is a 30 item scale designed to assess people's broad range of positive (e.g. Content) and negative (e.g. Annoyed) emotional reactions to work. An overall score is derived from the sum of all items with the displeasureable reverse coded and high scores indicate high levels of Job related affective well-being. Respondents rate the amount to which their job has made them feel a particular emotion in the past 30 days on a 5 point scale ranging from *"Never," (Rarely, Sometimes, Quite often) to "Extremely Often or Always".* emotional reactions to their job. It measures the employees' perceptions of their well-being at work. In common with all the other scales in the study, this scale had been tested for validity and reliability by Bayram et al (2004) in the context of Turkey and high levels of reliability were confirmed. The emotions can be placed into four categories (subscales) that fall along two dimensions: pleasurableness and arousal (intensity). High pleasurable-High arousal (HPHA), High pleasurable-Low arousal (HPLA), Low pleasurable-High arousal (LPHA) and Low pleasurable-Low arousal (LPLA). Each subscale includes the five most extreme items appropriate for each category and for each, high scores represent high levels of that state.

3.   Job satisfaction scale: (JSAT) To measure job satisfaction, the Camman, Fichman, Jenkins and Klesh (1983) short job satisfaction scale (This measure as part of the Michigan Organizational assessment) was used. Questionnaire (OAQ) uses 3 items to describe an employee's subjective response to working in his or her job and organizations. This is a global indication of worker satisfaction with a job. This scale responses are obtained using 7 point likert type scale where 1- strongly disagree to 7- strongly agree.

Method: Data in this work have been attained the prison in a city.. Questionnaires with free return envelopes were distributed in sealed envelopes to all prison officers by prison psychologist. We collected these 3 days later. Anonymity was guaranteed, and information about the study was provided by the prison management. Incomplete questionnaires were not used in the data analysis. Therefore 154 usable responses were received. (5 Q. moved). The average age of participants was 41.40 years (*SD* = 9.71 years), with ages ranging between 24

and 59 years. All participants was male. Of the sample, 86% were employed as a prison guard. The data showed that, on average, participants had held their current job for 13 years ($SD = 9.9$)

Results

A range of statistical tests were undertaken to determine the basic relationships between the variables. Stepwise regression analysis was used to measure correlations among the different scales.

Descriptive statistics, including means, standard deviations and internal consistency reliabilities (coefficient alpha) are shown for all the study scales in Table I.

Table 1. Descriptive Statistics and Reliability Analysis of the Study Instruments

	İtem	Mean	SD	Reliability
LAWS Totaly	**16**			
ED	8	18.41	8.21	.85
LSC	8	17.24	7.94	.85
JAWS Totaly	**30**			
HPHA	5	11.88	5.09	.89
HPLA	5	12.47	4.77	.81
LPHA	5	19.10	5.45	.89
LPLA	5	18.59	5.53	.89
JSAT	**3**	10.88	3.86	.69

According to Table 1, all scale reliability is significant.

According to the findings shown in Table 2, there is a significant relationship between the loneliness of the employees and all the dimensions of the JAWS and JSAT.

Table 2. Correlations Among Variables

	HPHA	HPLA	LPHA	LPLA	ED	LSC	JSAT
HPHA	1						
HPLA	.786(**)	1					
LPHA	.494(**)	.430(**)	1				
LPLA	.505(**)	.423(**)	.896(**)	1			
ED	-.287(**)	-.266(**)	-.533(**)	-.497(**)	1		
LSC	-.449(**)	-.451(**)	-.273(**)	-.255(**)	.430(**)	1	
JSAT	.388(**)	.429(**)	.435(**)	.389(**)	-.421(**)	-.350(**)	1

** Correlation is significant at the level of 0.01 (2-tailed).

At this stage of the study, regression analysis was performed to determine any relationship and the strength of such a relationship between the dependent variable of Job Satisfaction and the independent sub-dimension variables of Loneliness.

Table 3. Result of Stepwise Multiple Regression Analyses

Independent variable	Dependent Variable	
	Job Satisfaction	
Loneliness at Work	ß	t
(Constant)	5.267	21.742**
Emotional deprivation (ED)	-.404	-3.815**
Lack of social companionship (LSC)	-.250	-2.894**
F	20.128**	
R²	.22	

**p<0.01

The results of the regression analysis showed a significant relationship between job satisfaction and the loneliness sub-dimensions of emotional deprivation and lack of social companionship. A significant relationship was also determined between the HPHA and the loneliness sub-dimension of lack of social companionship (LSC), (p<0.05). No significant relationship was found between HPHA and emotional deprivation (p>0.05).

The results of the regression analysis showed there to be a significant relationship between the HPLA and the loneliness sub-dimensions of lack of social companionship (p<0.05). No significant relationship was found between HPLA and emotional deprivation (p>0.05).

The results of the regression analysis showed a significant relationship between the LPHA and the loneliness sub-dimension of emotional deprivation (p<0.05). No significant relationship was found between LPHA and lack of social companionship (p>0.05). A significant relationship was determined between the LPLA and the loneliness sub-dimension of Emotional deprivation (p<0.05). No significant relationship was found between LPLA and lack of social companionship (p>0.05)

Discussion and Conclusion
As has been seen in literature, the results of this study showed a significant relationship between the feeling of loneliness and job satisfaction and emotional well-being related to work.
Previous studies have reported that loneliness in the workplace is related to several work-related characteristics. For example, loneliness in the workplace has been reported to be significantly related to competitiveness, support from colleagues, support from outside work, management support, workload, climate of fear, sense of community, job fulfilment, perceived work stress, organisational attachment, and life fulfilment (Wright, 2005, Wright et al, 2006, Wright, 2011, Chana et al, 2011).
One of the issues with attempting to define work-related loneliness for wide application is that there is a large variation in what makes individuals feel lonely, and the way they potentially perceive relationship deficiencies in the workplace. Moreover, because of the complexity of loneliness, its everyday usage is often confused with other related terms, such as aloneness, isolation, solitude, and lack of social support.
There are subtle but important differences between these terms, particularly in the workplace. In general, aloneness, isolation, and solitude tend to refer to the objective characteristics of a social environment, whereas loneliness is based on an individual's perception. Loneliness is often referred to, and confused with, a lack of social support. However, it is generally agreed that a lack of social support refers to deficiencies in quantifiable social assistance or resources

from others, whereas loneliness is more subjective, referring to the perception one has of their social deficits.

Therefore, employees who feel emotionally and/or socially alone in the workplace should be encouraged through interviews with specialists to provide support in raising awareness and expressing themselves verbally rather than in physical ways without having realised the tensions.

In conclusion, it can be said that to increase work performance in workplaces with extremely difficult working conditions, such as prisons, to increase the employees' attachment to work and raise job satisfaction, managers must comprehend the importance of this issue.

Therefore, employees who feel emotionally and/or socially alone in the workplace should be encouraged through interviews with specialists to provide support in raising awareness and expressing themselves verbally rather than in physical ways without having realised the tensions. In addition, to improve relationships between employees and increase interaction, training can be arranged on topics such as 'conflict resolution skills' and 'communication skills'.

Limitations Of The Study

The participants in this study was the male prison officers. On the other hand, due to time constraints and busy schedules of the prison officers it was difficult to interact with them completely. So we used only questionary. The other problem, the sample size was limited to only one prison in Turkey. The responses may be influenced by personal bias.

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Indicators for te Measurement of Eco-Innovation and Application in Brazil

Abstract:

Macroeconomic aggregates have undergone considerable evolution throughout the 20th century, due to the incorporation of new elements related to aspects such as income distribution and development quality. The Gini index that measures the income concentration of a particular group of the economic activity, and the HDI that evaluates the longevity, education and wealth generation of a nation, are examples of this evolution. We observed that in the first decade of the 21st century, modern society focused its attention more closely on another two aspects, the happiness of a nation that can be measured by the GDH index, and the degree of environmental sustainability of economic development. Countries such as the Netherlands, France, Canada, Denmark, and others, have been contemplating the development of ecological indicators of a specific and generic nature in order to measure the advances that surround the topic of sustainable development, both on a national and a corporate level. Innovation is the mainspring in the development of companies, and the innovation indicators were incorporated into international research (Oslo Manual) and in Brazil by the IBGE with the Technological Innovation Survey (PINTEC). The objective of this article is both to ascertain whether PINTEC incorporates the ecological indicators, and to provide subsidies for the discussion of the preparation of the Brazil Eco-Innovation Index. We conducted a review of the international literature explicitly stating the main eco-innovation indicators for a subsequent comparison with the work underway in Brazil. We aim to contribute by means of a debate to the preparation of a set of ecological indicators that need to be incorporated in research in Brazil.

Keywords: Eco-Innovation; Eco-Innovation Indicators; Technological Innovation Survey; Brazil Eco-Innovation Index.

1 INTRODUCTION

In the last century, the generation of wealth was by means of what was then known as the "brown economy" (UNITED NATIONS ENVIRONMENT PROGRAMME, 2011), an economic system based on the pillars of production and demand (CHAPPLE, 2008), strongly based on the belief in material (unlimited) progress and in the productive capacity of mankind. However, in the first decade of the new millennium the prevailing economic paradigm fostered not only the recurrence of economic crises (CHAPPLE, 2008), but also the ecological crisis (AGOSTINI, 1996). The ecological crisis demands a holistic view that considers the relationship between modern society and nature; it leads to a restructuring not only in the political and economic arena, but also in the institutional sphere on a global scale. A new economic paradigm called "green economy" (United Nations Environment Programme, 2011) is proposed in this context. The green economy can be defined as "one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities" (UNITED NATIONS ENVIRONMENT PROGRAMME, 2011, p. 16). The ecological scarcity is based on the perspective of the ecological dependence of society; it is created by complex and interdependent relations with the ecosystem, of which the limits of mankind are imposed by the laws of nature.

In general, the green economy aims at the efficient use of resources, environmental protection and poverty eradication, and is related to a broader definition of sustainable development. (UNITED NATIONS ENVIRONMENT PROGRAMME, 2011). In this context, the public sector performs the role of promoting the transition between the paradigms by means of control policies in excessive environmental degradation, implementation of effective and adequate information programs, incentives, investments, infrastructure, and others (UNITED NATIONS ENVIRONMENT PROGRAMME, 2011); one of the essential drivers for the transition process is the creation of eco-innovation indicators, which consist of the incorporation of environmental aspects in the innovations of processes, products, services, organizational structure and marketing (KEMP; FOXON, 2007; KEMP; HORBACH, 2008; REID; MIEDZINSKI, 2008).

In Brazil's case, there is a joint action between the Ministry of Science, Technology and Innovation (MCTI) and the National Council for Scientific and Technological Development (CNPq), which aim to promote research that facilitates the development both of technologies for the transition to the green economy and technologies for the prevention and mitigation of natural disasters, more specifically by means of project CNPq-MIT no. 29\2012 (NATIONAL COUNCIL FOR SCIENTIFIC AND TECHNOLOGICAL DEVELOPMENT, 2012). For this reason, it is vital to develop and\or have efficient mechanisms to measure eco-innovation, since this helps to identify its progress within the various dimensions of its scope of activity, and also to evaluate the countries and the dissociation of economic progress with environmental degradation (ARUNDEL; KEMP, 2009).

Several authors indicate that the measurement process, more specifically in establishing appropriate indicators to evaluate eco-innovation, is undergoing a creation and structuring process (EUROPEAN ENVIROMENT AGENCY, 2006; LÁZARO; et. al., 2008). This is evident in the actual international literature on eco-innovation, in which there are authors who focus on eco-innovation indicators of a generic nature (KEMP; HORBACH, 2008; ALMEIDA, 2008; OLTRA; KEMP; VRIES, 2008; HUBER, 2008; KEMP; HORBACH, 2008; KEMP; PEARSON, 2008; REID; MIEDZINSKI, 2008; ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT, 2009; ARUNDEL; KEMP, 2009), and eco-innovation indicators of a specific nature such as Material Input Per Service Unit (MIPS), Material Flow Analysis (MFA) and eco-efficiency (WORLD BUSINESS COUNCIL FOR SUSTAINABLE DEVELOPMENT, 2000; VERFAILLIE; BIDWELL, 2000; KEMP;

FOXON, 2007; ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT, 2008; REID; MIEDZINSKI, 2008; LÁZARO; et. al., 2008; RODRIGUES, 2009).

The studies made available by countries such as the Netherlands, France, Canada, Denmark, and others, have been contemplating the development of eco-innovation indicators in order to measure the advances that permeate the topic of sustainable development, both in the national sphere and in that of firms. However, in the specific case of Brazil, the development and the application of the ecological indicators is incipient. Thus, the underlying study is not intended to provide a complete overview, i.e., does not aim to explore all the ramifications available in the international literature on eco-innovation, but instead to promote debate on the topic of eco-innovation indicators in Brazil, and to stress the importance of their incorporation in the government evaluation systems in order to assess the capacity both of the country and of the organizations to fulfill the precepts of sustainable development.

The article presents four (4) sections in addition to this introduction. The second section involves the theoretical benchmark of eco-innovation, establishing the definition, taxonomies and eco-innovation indicators. The third section performs an analysis of the Technological Innovation Survey in Brazil (PINTEC) and a comparison with what is being developed internationally, aiming to furnish subsidies for the discussion concerning the preparation of a Brazil Eco-innovation Index. The fourth and last section sets out the final considerations of the study.

2 DEFINITION OF THE CONCEPT AND TAXONOMIES OF ECO-INNOVATION

Schumpeter (1936; 1985) defines innovation as a process that starts with invention, and materializes through the development of sequential activities able to transform a product and\or service that appeals to the consumer market. According to Schumpeter innovation is established by the: i) introduction of a new product and\or service, with which the consumer market is not familiar; ii) introduction of a new production method; iii) opening of a new market for the company; iv) new sources of supply of raw material; and v) a new structure in the industry. As a matter of fact, such characteristics are the driving force of the capitalist system (SCHUMPETER, 1985). However, with the ecological crisis (AGOSTINI, 1996), innovation has been linked to environmental aspects (EUROPEAN ENVIROMENT AGENCY, 2006); a new term was coined in the mid-1990s, eco-innovation (KEMP; HORBACH, 2008), which is considered the sixth (6th) wave of innovation based on the principles of sustainability (LOVINS, 2008).

Eco-innovation is associated with a new product and\or process that creates value for the organization, but that, at the same time, presents a lesser environmental impact (JAMES, 1997 apud KEMP; FOXON, 2007). To Reid and Miedzinski (2008), eco-innovation is defined as:

Eco-Innovation means the creation of novel and competitively priced goods, processes, systems, services, and procedures that can satisfy human needs and bring quality of life to all people with a life-cycle-wide minimal use of natural resources (material including energy carriers, and surface area) per unit output, and a minimal release of toxic substances (REID; MIEDZINSKI , 2008, p. i).

In this case, eco-innovation is an innovation geared towards eco-efficient technologies; it provides direct and indirect benefits for the environment, aiming at the reduction of pollution, the development of environmentally friendly products and services, the efficient use of

resources and others (KEMP; FOXON, 2007). In this context, eco-efficiency is defined by the World Business Council for Sustainable Development (2000) as being:

 "the delivery of competitively priced goods and services that satisfy human needs and bring quality of life while progressively reducing ecological impacts and resource intensity, through the life cycle, to a level at least in line with the earth's estimated carrier capacity" (WORLD BUSINESS COUNCIL FOR SUSTAINABLE DEVELOPMENT, 2000).

Just as in the literature on innovation, eco-innovation establishes taxonomies not only in order to classify it, but also to assist in the measurement process. Huber (2008) and Reid and Miedzinski (2008) point out five taxonomies of eco-innovation, which are: i) eco-innovation based on the life cycle perspective, which is grounded both in a new product and in significant improvements in any phase of the life cycle of the product. This taxonomy envisages a reduction, be it in the use the raw materials, or in the levels of waste produced in any phase of the life cycle of the product, i.e., from the production phase through to consumption; ii) product eco-innovation refers to the new and\or improvement of a respective product, in which the global impact on the environment is minimized; iii) process eco-innovation is based on the new and\or improvement of the productive system, aiming to fulfill some sustainable principles such as reduction in the consumption of water, energy, raw material, emission of gases and waste; iv) organizational eco-innovation that addresses the inclusion of specific environmental management tools; and v) marketing eco-innovation is based on the implementation of new methods in marketing, embodying significant changes in the product design, packaging, promotion of products, markets, and others.
Finally, eco-innovation can be classified according to its nature, as either sustainable and\or disruptive. In the sustainable approach eco-innovation is seen as a catalyst, serving as a means of support for the use of existing technologies, while disruptive eco-innovation is grounded in a new technology (ARUNDEL; KEMP, 2009).

2.1 ECO-INNOVATION INDICATORS

The eco-innovation measurement process currently presents several not necessarily convergent ramifications. The economic theoretical benchmark that sustains the value creation concept is the first point of discord, due to the dichotomy between the neoclassical school, which assigns to utility a basic concept for the measurement of value creation and the Marxists whose theoretical benchmark is based on labor as an essential variable for value creation. Another material difficulty arises from the lack of consensus in establishing which are the relevant environmental indicators and the arduous task of establishing the relationship between innovation and environment-related aspects. For illustration purposes, not every cost cutting process is beneficial to the environment; we know that coal is used owing to its low cost. As process innovation is measured through cost reduction, not every process innovation is beneficial to the environment. Moreover, it is worth emphasizing the existing complexity, as a result of which the measurement process should consider all the phases of the productive chain, going from the extraction stage to production and consumption, and ending up with the disposal, since all the stages present a strong environmental impact (KEMP; ARUNDEL, 1998). However, the development of eco-innovation indicators is undergoing a conformation process, according to the report from the European Environment Agency (EUROPEAN ENVIRONMENT AGENCY, 2006).
In general, traditional eco-innovation measurement processes are centered on estimating a value based on the investments made by companies, which aim to reduce the pollution originating from their productive processes. Kemp and Arundel (1998) and Lázaro et. al. (2008) believe that new indicators can be included, encompassing: staff training programs,

design of products considered "green" and\or "ecological", introduction of environmental learning techniques, creation of teams to deal with environmental problems or even environmental management and auditing systems.

Due to the complexity existing in the measurement process, the eco-innovation analysis can be divided into three levels, namely: i) micro that addresses products, processes, services and organizational structure; ii) meso that considers the industry, the supply chain, a region, systems of products and of services; and iii) macro that as the name suggests, takes into account economic aspects in the macroeconomic sphere (REID; MIEDZINSKI, 2008; KEMP; HORBACH, 2008). The underlying study will focus on the micro level eco-innovation indicators; thus, the micro level analysis considers the organizational performance on one hand, and the individual products and processes on the other, while organizational performance arises from the eco-innovations of products and of processes. (REID; MIEDZINSKI, 2008).

Reid and Miedzinsk (2008) provide some indicators in order to evaluate efficiency in the use of resources, called Material Input per Service Unit (MIPS) (see Figure 1). MIPS aims to measure the quantity of inputs used during the manufacture of a product and\or service; this indicator is of a holistic nature, as it starts with the extraction of the raw material, moves on to the total quantity of inputs consumed during the production process, and ends in the reuse, recycling and elimination processes. Hence productive efficiency is attainable through eco-innovation, in which the same quantity of resources may result in a larger quantity of products and of services offered.

Figure 1 - Material Input per Service Unit.

$$MIPS = \frac{Material\ Inputs}{Service\ Unit}$$

Source: Prepared by the authors from Reid and Miedzinsk (2008, p.8)

However, one of the major challenges of eco-innovation consists of relating innovation to efficiency. According to Reid and Miedzinsk (2008), eco-innovation targets the reduction of material flows. Thus technological and non-technological innovations must be linked to the elements of sustainable development. In this perspective, the Organization for Economic Cooperation and Development (2008) developed the Material Flow Analysis (MFA) indicator, which aims to measure the physical unit of the material flow. Table 1 below informs another six indicators formed from the MFA.

Table 1 – Material Flow Analysis Indicators

MFA Indicators	Description
Domestic Extraction Used – (DEU)	Measures the flow of materials extracted from the environment, which have physically entered the economic system via production and/or consumption.
Direct Material Input – (DMI)	Measures the input of materials for use in an economy. All the materials that have an economic value, and are used in the production and consumption activities.
Domestic Material Consumption – (DMC)	Measures the total quantity of materials used directly in an economy. The DMC may use generic measurements, such as consumption of energy, water and others.

Total Material Consumption – (TMC)	Measures the total quantity of materials used in domestic production and consumption. Includes the indirect flow of imports.
Physical Trade Balance – (PTB)	Reflects the trade deficit and/or surplus. This is defined by the expression imports minus exports.
Total Domestic Output – (TOD)	Refers to the environmental burden of the use of materials. And the quantity of materials that have left the environment, in response to economic activities.

Source: Reid and Miedzinsk (2008, p. 11)

Eco-innovation is an innovation that leads to eco-efficient technologies. In this regard, ecologically-oriented projects assist in the conceptualization and measurement of innovation, referring to the changes in resource productivity and\or in the efficiency of the productive processes (KEMP; FOXON, 2007).

Lázaro et. al. (2008) developed an indicator to measure eco-innovation. According to these authors, the indicator is composed both of innovation factors and of environmental factors. Figure 2 illustrates the two main factors considered in the eco-innovation equation, which are: i) the innovative effort parameter; and ii) the eco-efficient performance parameter. The two parameters are related to products, services and processes. According to these authors any innovation that can be classified as eco-efficient is an eco-innovation.

Figure 2 – Eco-innovation indicator.

Eco-innovation indicator = Innovation factor * Eco-efficiency factor

Source: Lázaro et. al.(2008, p. 45)

For this reason, understanding eco-innovation and its true economic potential requires not only including the innovations related to processes, products, services, organizational structure and marketing, but also the agents involved and their respective impacts. In this context, the main indicators of the innovation factor illustrated in Figure 2 are grouped in four categories as informed in Table 2, and are: i) input indicators that cover a set of resources necessary for the development of the innovative activities; ii) output indicators that aim to control the activities related to the innovative results obtained; iii) indicator of the financial value that is based on the total sum of investments in technology venture capital, divided by the benefits arising from products, services and processes. iv) organizational innovation indicators that establish the alteration and creation of the structure, business practices, including innovation of processes, marketing and of the business model itself (LÁZARO; et. al., 2008).

Table 2 – Innovation factor indicators

Category	Indicators	Description
Input Indicators	Total RTD investments	Total percentage of innovation expenses: includes a range of innovation activities that encompass the internal and external environments. Spanning the acquisition and/or development of machinery and equipment, expenditures with licenses and patents, manufacturer's design, training and marketing innovation.
	Number of RTD projects executed	Refers to the number of RTD projects in processes, products and services executed over a period of time.
	Training	Based on total expenses related to innovative

	expenses	processes, products and services.
	RTD staff	Based on the number of people who work at least 50% of the time on RTD projects.
Output Indicators	Intellectual Property	Number of patents granted. It is a means of measuring the intellectual property of innovation and of new ideas.
	New processes	Number of processes that are novel or improved.
	New products and services	Number of novel or substantially improved products and services.
	Sales resulting from innovation	Aims to obtain the percentage of sales reached after the innovation. A comparison is made between the pre- and post-innovation periods.
	Innovation expenses	**% of the business volume = $\dfrac{\text{Total Innovation Expenses}}{\text{Business Volume}}$** Innovation expenses include all the expenditures incurred in innovation activities.
Financial Value Indicators	Volume of investments in venture capital technology	**VITVC = $\dfrac{\text{Total Sum of Investments in Venture Capital Technology}}{\text{Network of Benefits}}$**
Organizational Innovation Indicators		Environmental certifications; Internal and external environmental audits; Formalized environmental policies; Environmental reports available to the public; Environmental programs for the employees.

Source: Prepared by the authors from Lázaro et. al. (2008, p. 46).

The eco-efficiency factor illustrated in Figure 2 presents variations over a particular period (LÁZARO; et. al., 2008). According to the World Business Council for Sustainable Development (2000), eco-efficiency can be measured from the product and\or service level. As seen in Figure 3, the value of the product and\or service refers to the value added; on the other hand, the environmental impact is hard to measure, based on the use of resources in the productive processes.

Figure 3 - Eco-efficiency.

$$Eco\text{-}efficiency = \frac{Value\ of\ the\ Product\ and\ Service}{Environmental\ impact}$$

Source: World Business Council for Sustainable Development (2000)

Verfaillie and Bidwell (2000) provide the main indicators to measure the value of the product and\or service that embody: i) quantity of goods and services produced and\or supplied to the customers that refers to a physical measurement, i.e., the count of products and of services delivered to the end consumer, which can be measured by the mass and volume; and ii) net sales that are based on the sales recorded minus the discounts, returns and loans.

To Rodrigues (2009), the environmental impact (Figure 3) involves two analysis perspectives. The first perspective refers to the demand for consumer goods and its relationship with urban

waste generation. The second perspective is based on the supply, i.e., considers all the technologies used, and the respective environmental impacts. According to Figure 4, the demand is influenced by the economically active population (EAP), by total employment (Ntotal) and by the real wage (wreal). The supply is composed of the firm's expectations in keeping with the demand. Accordingly, while the variables Ntotal and wreal increase as a result of economic upswings, the demand is also affected via consumption growth, with a resulting increase in the environmental impact; the opposite occurs during periods of economic recession. This equation evidences a trade-off between economic progress and the environment, in which eco-innovation is a means of resolving this dilemma (RODRIGUES, 2009).

Figure 4 – Environmental impact

$$Ienvironmental_t = \frac{wreal_t}{tau_t} * \frac{Ntotal}{EAP}$$

Source: Rodrigues (2009, p. 82)

Verfaillie and Bidwell (2000) present another perspective to evaluate the environmental impact providing the respective eco-innovation indicators: i) energy consumption: the total energy consumed that is equal to the energy purchased and\or obtained; ii) material consumption: meaning the sum of the weight of the materials purchased and\or obtained through other sources; iii) water consumption: meaning the sum of all the water purchased from a supplier; and iv) greenhouse gas emissions (GHG); considers the emissions of carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons and perfluorocarbons (HFCs and PFCs), and sulfur hexafluoride (SF_6), originating from the production systems.

Furthermore, the four eco-innovation indicators can be measured by the respective equations (Figures 5 to 8) (LÁZARO; et. al., 2008).

$$\delta E = \frac{\left(\frac{E_0}{FU_0} - \frac{E_1}{FU_1} \right)}{\frac{E_0}{FU_0}}$$

$$\delta M = \frac{\left(\frac{M_0}{FU_0} - \frac{M_1}{FU_1} \right)}{\frac{M_0}{FU_0}}$$

Figure 5 – Eco-efficiency and energy equation and materials equation
Source: Lázaro et. al. (2008, p. 48) (2008, p. 48)

Figure 6 – Eco-efficiency
Source: Lázaro et. al.

$$\delta W = \frac{\left(\frac{W_0}{FU_0} - \frac{W_1}{FU_1} \right)}{\frac{W_0}{FU_0}}$$

$$\delta GHG = \frac{\left(\frac{GHG_0}{FU_0} - \frac{GHG_1}{FU_1} \right)}{\frac{GHG_0}{FU_0}}$$

Figure 7 – Eco-efficiency and water equation and emissions equation
Source: Lázaro et. al. (2008, p. 48) (2008, p. 48)

Figure 8 – Eco-efficiency
Source: Lázaro et. al.

All the eco-innovation indicators illustrated in Figures 5, 6, 7 and 8 conduct a comparative analysis between the period before and after (*ex*-ante and ex-*post*) the implementation of eco-innovation. In this manner, a result that is positive and\or higher than 0 represents the efficiency, and a result that is negative and/or equal to 0 indicates the inefficiency of the processes, products, services and organizational structure (LÁZARO; et. al., 2008). According to Lázaro et. al. (2008), productivity (Tau) is a variable that aims to balance the environmental impacts with economic progress, in which the measurement process is designed to identify the actual gain of organizational productivity in a given period resulting from the innovation.

Figure 9 – Total productivity as a result of innovation.

$$Tau_t = max\ (tau_{t-1},\ tau_{t-in})$$

Source: Rodrigues (2009, p. 84)

Kemp and Horbach (2008), Arundel and Kemp (2009) and the Organization for Economic Cooperation and Development (2009) provide generic measures in order to measure eco-innovation at the micro level. Eco-innovation (Table 3) may be measured through input measures, intermediate output measures, direct output measures and indirect impact measures.

Table 3 – Modes of generic measurement for environmental innovation.

Modes of measurement	Data source
Input measures	R&D expenses and R&D personnel Expenditures with other innovations (for example, projects, software and selling).
Intermediate output measures	Quantity of patents and quantity of types of scientific publications.
Direct output measures	Quantity of innovations, description of individual innovations and sales of new products going from innovations.
Indirect impact measures	Change in the efficiency and in the productivity of resources.

Source: Prepared by the authors from Kemp and Horbach (2008), Arundel and Kemp (2009) and the Organization for Economic Cooperation and Development (2009).

The input measures are represented by investments in R&D in the environmental area, which provide direct and indirect results for the organization (Almeida, 2008). Generally speaking, R&D expenditures provide an indicator to measure innovative activities either at the organizational level or at the country level (OLTRA; KEMP; VRIES, 2008).

Arundel and Kemp (2009) point out that statistics in R&D are used extensively to evaluate innovation. However, it is a mechanism with limitations as it: i) considers only formal R&D laboratories, excluding small companies that conduct R&D informally; ii) does not consider non-technological innovations such as marketing, both organizational and institutional; and iii) does not cover the efforts made in the service sector. Therefore, the R&D analysis should consider investments geared towards environmental matters, spanning two perspectives, namely: i) environmentally motivated R&D; and ii) environmentally relevant R&D, in order to reduce the environmental burden that falls upon the company (ARUNDEL; KEMP, 2009).

For intermediate output measures patents are useful to measure innovation. However, this indicator does not furnish the potential economic value. Moreover, the industry of services such as ecotourism hardly ever patents its innovations (KEMP; HORBACH, 2008). However, the analysis of this indicator allows an evaluation of characteristics of innovative processes, and is made up of seven elements: i) level of innovative activity; ii) types of technological

organizational innovations and competencies; iii) technological diffusion; iv) source of invention; v) degree of novelty; vi) technological strong points of nations; and vii) technological spillovers and the relation of knowledge (KEMP; PEARSON, 2008).

Patents in the sphere of eco-innovation are called eco-patents. For a patent to be considered an eco-patent, it is necessary to have a description that informs the environmental gain arising from this invention (ARUNDEL; KEMP, 2009). The eco-patent is an indicator that can be used to measure green inventions, in which the main motivation is the reduction of environmental impacts (OLTRA; KEMP; VRIES, 2008). Table 4 provides the main indicators in eco-patents, their definitions, and respective interpretations.

Table 4 – Eco-patent indicators.

Type of indicators	Definition	Interpretation
Eco-patent estimate	Accumulated number of eco-patents.	Evolution of eco-patients over time.
Eco-patent share	Share of eco-patent in total patents. National share of the eco-patent in the total number of patents in the same technological field.	Evolution of eco-patient over time, and across countries.
Technological specialization index	National share of the eco-patent in a particular area, divided by the overall share of the eco-patent in this area. Ditto for the companies.	The proportion of technological specialization is equal to 1.
Knowledge and value of the eco-patent	Citation rate of patents.	Knowledge flow as a proxy of patent value.
Diversification	E(X)=Σpi.ln PI Entropy. pi is the number of patents in a given technology.	Entropy of the distribution of patents among technologies as a proxy of the technological variety present in the distribution of patents among technologies in a particular industry.
Market	Rates of patents.	A proxy of the proximity of patents with commercial exploitation in the market.
Patent portfolios	Relative share of patents in various technological options, in relation to the total number of patents in the portfolio of companies.	Eco-patenting strategies of diversified companies.

Source: Oltra, Kemp and Vries (2008, p. 23)

The eco-patent is an indicator that can also measure the technological capacity of the firm and/or of a country in eco-technologies, by means of the equation illustrated in Figure 10.

Figure 10 – Advantage of relative patents.

$$RPA_{ij} = 100 * \tanh \ln\left[\frac{P_{ij} / \sum_j P_{ij}}{\sum_{i=1}^{n} P_{ij} / \sum_{ij} P_{ij}}\right]$$

Source: Kemp and Horbach (2008, p. 32)

Moreover, the intermediate output measures (see Table 5) referring to green products can be measured through the announcements made by the organizations, i.e., organizational announcements become an indicator to measure eco-innovation. Announcements need to emphasize environmentally material aspects of the product and/or service offered (ARUNDEL; KEMP, 2009).
Finally, Lázaro et. al. (2008) provide an equation in order to assess the real impact of eco-innovation in the organizational sphere. Generally speaking, it aims to provide information relating to the eco-innovative effort of the firm, and that serves as a mechanism of support to this information (see Figure 11).

Figure 11 – Measurement of the impact of eco-innovation.

*Eco-innovation indicator = Innovation factor * Eco-efficiency factor*

*= Result of the eco-innovation indicator * Number of units sold*

Source: Lázaro et. al. (2008, p. 51)

3 PINTEC

The Brazilian Institute of Geography and Statistics (IBGE) is responsible for conducting the Technological Innovation Survey (PINTEC). The purpose of PINTEC is the construction of sectorial and regional indicators related to the innovative activities of Brazilian companies, since the unit of analysis is the firm (BRAZILIAN INSTITUTE OF GEOGRAPHY AND STATISTICS, 2012). The current PINTEC model involves technological innovations of products and of processes besides non-technological innovations referring to organizational aspects and marketing, according to the Technological Innovation Survey report of 2008, made available on the website of the Brazilian Institute of Geography and Statistics (BRAZILIAN INSTITUTE OF GEOGRAPHY AND STATISTICS, 2012). It is also worth emphasizing that PINTEC is a transversal survey, in which the evaluation is carried out in specific periods of time, with three-year periodicity. PINTEC defines innovation as follows:

"innovation refers to a new (or substantially improved) product and/or process for the company, which is not necessarily new to the market/sector of activity, and may have been developed by the actual company or by another company/institution" (BRAZILIAN INSTITUTE OF GEOGRAPHY AND STATISTICS, 2012, p. 3).

This definition addresses the perspective of technological innovation that is established by processes and products. It also involves the nature of the innovation, which can be incremental and\or radical; and, finally, the internalization and\or externalization processes of innovative activities. From 2008, PINTEC began to measure non-technological innovations, concerning the organizational structure and marketing. The appreciation of non-technological

innovations in the organizational structure is intended to identify both the development and the implementation of novelties. For non-technological innovations in marketing PINTEC investigates the organization's capacity to respond to the consumer market.

PINTEC is built on three levels of measures, namely: i) input measures; ii) output measures; and iii) impacts arising from innovations; besides the non-technological innovations associated with the organizational structure and with marketing. The input measures that establish the Technological Innovation Survey are both activities related and unrelated to R&D, such as patent acquisition, software, contracting of technical services, equipment acquisition, and others. According to information published in the Technological Innovation Survey report of 2008, these indicators aim to measure the innovative efforts in products and processes undertaken by Brazilian companies.

The output measures addressed by PINTEC cover the intellectual property of new and/or substantially improved products and processes. The objective of intellectual property, as underlined in the triennial report of 2008, is to investigate the main methods of appropriation of the innovations, whether formal through patents, trademark, registration of design and copyright, or of a strategic nature covering trade secrets, design complexity, advantages of time over competitors, and others. Finally, PINTEC evaluates the impacts arising from innovations pertaining to products, markets, processes and aspects related to the environment. These measures aim to identify the direct and indirect effects on the company's competitiveness through innovative activities. The main impacts of innovation are associated with relative aspects, namely: i) market: maintenance and expansion of market share; ii) product: improvement in the quality of goods and services; iii) process: increase in the productive capacity; and iv) environmental impact: reduction in the consumption of water, energy and raw material. On the other hand, the less important impacts are related to performance in the environmental sphere, according to the triennial report of 2008 (BRAZILIAN INSTITUTE OF GEOGRAPHY AND STATISTICS, 2012).

On the other hand, several studies have been conducted in Brazil in order not only to evaluate, but also to suggest new indicators for the Technological Innovation Survey (FURTADO; QUADROS, 2006; SANTOS; BASSO; KIMURA, 2012). The Department of Scientific and Technological Policy of the Geosciences Institute of Universidade Estadual de Campinas created the Brazil Innovation Index (IBI).

The creation of the IBI stems from the assumption that the innovation process is complex and involves several dimensions, with special emphasis on two, namely: i) the innovative effort undertaken by companies; and ii) the impact of innovation on technological and economic perspectives. Thus, two aggregate indicators are proposed in order to evaluate the innovation process at the firm level: the Aggregate Indicator of Effort (AIE) and the Aggregate Indicator of Result (AIR).

Both the AIE and the AIR are split into two indicators each: i) AIE is composed of the Index of Innovative Activities (IIA) and Index of Human Resources (IHR); and ii) AIR is formed by the Patent Index (PI) and by the Economic Impact Index (EII). IBI is calculated using the respective formula illustrated below in Figure 12.

Figure 12 - Formula of the IBI model

$$IBI = \left(AI \cdot P_1 + IRH \cdot P_2 \right) Q_1 + \left(PT \cdot P_3 + IRV \cdot P_4 \right) Q_2$$
$$Onde,$$
$$P_1 + P_2 = 1 \qquad P_3 + P_4 = 1 \qquad Q_1 + Q_2 = 1$$

Source: Santos, Basso and Kimura (p. 108, 2006)

The main intervening variables that compose the aggregate indicators of the IBI model present a conceptual structure based on the Oslo Manual. It considers both the human resource activities and innovative activities. Human resource activities are associated with the quantity of employees dedicated to R&D and stratified according to academic background; innovative activities are related to internal and external R&D efforts through acquisitions of machinery and software, training expenditure, launches of industrial projects and new products. And, finally, AIR that measures the performance based on indices related to the share of new and/or substantially improved products in the organizational revenue (FURTADO; QUADROS, 2006).

Santos, Basso and Kimura (2012) expanded the definition of performance suggesting that AIR (indices that measure the share of a new and\or substantially improved product in the organizational revenue) can incorporate the use of metrics traditionally used in corporate finance, replacing the revenue growth indicator with the performance variables ROA, ROE, ROS and Profit Margin. In addition, going from the theoretical benchmark of the Resource-Based View, these authors suggested that the indicator 'innovative capacity of firms' is related to three constructs: human capital, structural capital and relational capital; there is a considerable difference of opinion regarding how to define and measure these constructs.

According to these authors, the construct is composed of four aggregate indicators: i) internal capital indicator: considers expenses originating from training, internal R&D activities, machinery acquisitions and introduction of innovation; it aims to verify the internalization of activities related and unrelated in R&D; ii) relational capital indicator that is measured by means of the externalization of activities related and unrelated in R&D; iii) human capital indicator (IRH of the IBI model) evaluates the level of qualification of the staff allocated to the R&D area; it is measured based on the number of doctors, masters, specialists and graduates; and iv) AIR that considers financial metrics such as ROA, ROS and Profit Margin; ROE was excluded as it does not satisfactorily explain the business performance (SANTOS; BASSO; KIMURA, 2012).

As our goal is to furnish subsidies for the incorporation of eco-innovation indicators in PINTEC, we will be making a comparison between the indicators proposed by this survey and the indicators addressed in the international literature. Table 5 presents a summary of the comparison between the indicators considered by PINTEC and the ecological indicators considered in the international literature.

Table 5 - Comparison between the PINTEC indicators and the ecological indicators of the theoretical review.

Technological Innovation Measures – Micro Level	Indicators covered by PINTEC	Ecological indicators covered in the theoretical review
	Internal R&D activities **(Likert four-point scale\Value of expenditures)**	Environment-oriented R&D **(Value of expenditures)**
Input Measures	External acquisition of R&D **(Likert four-point scale\Value of**	N\D

	expenditures)	
	Acquisition of other external knowledge, exclusive software **(Likert four-point scale\Value of expenditures)**	N\D
	Acquisition of software **(Likert four-point scale\Value of expenditures)**	Acquisition of software of environmental management systems and design of products considered "green" and\or "ecological"
	Acquisition of machinery and equipment **(Likert four-point scale\Value of expenditures)**	N\D
	Training **(Likert four-point scale\Value of expenditures)**	Training programs with ecological considerations
	Introduction of technological innovations in the market **(Likert four-point scale\Value of expenditures)**	N\D
Output Measures	Intellectual property **(Number of patents, copyright, and others)**	Eco-patent, main indicators: Estimate of the eco-patent **(Accumulated number of eco-patents)** Share of eco-patent **(Share of the eco-patent in the total number of patents)** Technological specialization index **(National share of the eco-patent in a particular area, divided by the global share of the eco-patent in this area)** Knowledge and value of the eco-patent **(Patent citations index)** And others
	New and/or substantially improved products **(Yes or no)**	New and/or substantially improved products **so that the environmental impact is minimized**
	New and/or substantially improved processes **(Yes or no)**	New and/or substantially improved processes **with environmental considerations**
	Product	

Impacts	(Likert four-point scale\ Percentage of net sales and in exports)	N\D
	Market (Likert four-point scale)	N\D
	Processes (Likert four-point scale)	Efficiency in the productive system through the eco-innovation indicator: Eco-efficiency **Eco-efficiency = value of product and service** **Environmental impact** Productivity of resources, through the eco-innovation indicator: MIPS **MIPS = material inputs** service unit
	Environmental impact (Likert four-point scale)	Eco-efficiency **Eco-efficiency = value of product and service** **Environmental impact**
Non-Technological Innovation Measures		
Organizational	Novelty of the organizational structure	Environmental certifications Internal and external environmental audits Formalized environmental policies Environmental reports available to the public Environmental programs for the employees
Marketing	Changes in the marketing channels	**Introduction of environmental aspects in the promotion of products**
Technological Innovation Measures – Meso Level	**Indicators covered by PINTEC**	**Ecological Indicators covered in the theoretical review**
a) Eco-innovation activities of companies from various industries b) Eco-efficiency at the meso level	N\D	Micro-aggregate indicators + Data on commerce Data on flows of materials associated with the industry or other area of activity Systemic dynamic modeling of the impacts of the eco-innovations Analysis of patents Thematic analyses or case study on eco-innovative products or type of eco-

Technological Innovation Measures –Macro Level	Indicators covered by PINTEC	Ecological Indicators covered in the theoretical review
		innovation using the systemic approach (value chain, product systems)
a) National innovation and eco-innovation system b) Eco-innovation activity and economy, consumer behavior and natural environment	N\D	Micro-aggregate indicators on the eco-innovative activities of companies + data on commerce Analysis of patents Publications Contribution of eco-innovation activities in particular (vales added) to the productivity of resources (DMC\GDP and EMC\GDP)

Source: Prepared by the authors from Kemp and Arundel (1998), Kemp and Horbach (2008), Oltra, Kemp and Vries (2008), Lázaro et. al. (2008), Reid and Miedzinsk (2008), Arundel and Kemp (2009), Organization for Economic Cooperation and Development (2009), Brazilian Institute of Geography and Statistics (2012)

According to Table 5 the measurement process encompassed by PINTEC is focused on the firm's innovative capacity (micro level) addressing technological (processes and products) and non-technological (organizational structure and marketing) innovations. On the other hand, the international literature on eco-innovation indicators addresses another two levels in order to evaluate the industries and the country in eco-innovation. These levels are: i) meso level; and ii) macro level.

At the micro level, more specifically in the input measures, PINTEC analyzes the degree of importance of innovative activities using a scale of four points referring to the activities related and unrelated to R&D, as well as the expenditures incurred in these activities. On the other hand, the eco-innovation indicators contemplated by international literature consider in the measurement process the expenses incurred in the eco-innovative activities, more specifically in the expenditures with R&D involving environmental concerns. The output measures of PINTEC involve the number of property right registrations, and whether the company has introduced a new and\or substantially improved product and process or not. The eco-innovation indicators that concern the output measures, in turn, highlight the eco-patents, which can be measured by: i) eco-patent estimate: aims to evaluate the evolution of the eco-patent over time; ii) eco-patent share: analyzes the evolution of the echo-patent over time between countries; iii) technological specialization index: aims to identify the proportion of technological specialization; and iv) knowledge and value of the eco-patent: investigates the flow of knowledge as a proxy of the value of patents. Finally, the impact measures gauge the real impacts of innovations on the company's competitiveness, while PINTEC evaluates the degree of importance by means of a four-point scale in products, processes, markets and environmental impacts. Furthermore, PINTEC analyzes the percentage of net sales arising from product innovations. According to the international literature on eco-innovation indicators, impact measures can be gauged through two expressions, namely: i) eco-efficiency: measured by the value of the product and\or service that encompasses the quantity of goods and services produced or supplied to the customers, being divided by the environmental impact that involves two analysis perspectives. The first perspective refers to

the demand for consumer goods and its relationship with urban waste generation. The second perspective is based on the supply, i.e., considers the technologies used and the respective environmental impacts; and ii) MIPS that aims to measure the quantity of inputs used during the manufacture of a product and\or service; this indicator is of a very far-reaching nature (holistic), as it starts with the extraction of the raw material, moves on to the total quantity of inputs consumed during the production process, and ends in the reuse, recycling and elimination processes.

The meso level covered by the international literature on eco-innovation indicators evaluates the global system of a product and\or service, technological regimes, industrial sectors, infrastructure and regions. We highlight five branches in Table 5: i) micro-aggregate indicators + data on commerce; ii) data on the flow of materials associated with the industry or other area of activity; iii) systemic dynamic modeling of the impacts of the eco-innovations; iv) analysis of patents; and v) thematic analyses and\or case study on eco-innovative products or type of eco-innovation using a systemic approach (value chain, product systems).

The macro level considered in the literature on eco-innovation indicators, seeks to evaluate the impacts of eco-innovation on macroeconomic aggregates such as the GDP, consumer behavior and even the impact on the natural environment (consumption of material and energy, waste production, quality of the soil air and water). In Table 5 we highlight 5 branches of research that merit the attention of researchers: i) micro-aggregate indicators on the eco-innovative activities of companies + data on commerce; ii) analysis of patents; iii) publications; and iv) contribution of eco-innovation activities in particular (values added) to the productivity of resources (DMC\GDP and EMC\GDP). It is worth emphasizing that we did not evaluate all the eco-innovation indicators that cover the meso level and the macro level in this review of literature, yet they should all be studied in order to identify the most important in the Brazilian context.

As can be seen in Table 5, we adopted a prudential posture. The impacts (results) of a new and\or substantially improved product that incorporates environmental concerns were considered unavailable. This is because we believe that in order to assume a scientific position, the results must be confirmed by scientific research and not just represent an ideological or doctrinaire position. We acknowledge that we did not conduct a literature sweep to confirm the impacts.

The first index marked in the IBI model is internal capital; it considers the innovative activities undertaken by Brazilian companies, in which the measurement process is by means of investments made in activities related and unrelated in R&D. Accordingly, the measurement process is strongly based on the resources allocated in these activities. The IBI model considers the expenses arising from internal activities in R&D, training and acquisitions of machinery (SANTOS; BASSO; KIMURA, 2012). In order to evaluate the firm's capacity to eco-innovate, the internal capital index must consider the eco-innovation indicators concerning R&D investments geared towards the development of products and processes with environmental considerations, expenses incurred with training based on environmental technique learning systems, and others (KEMP; ARUNDEL, 2008; LAZÁRO; et. al., 2008; ALMEIDA, 2008; OLTRA; KEMP; VRIES, 2008). Based on the form of the Technological Innovation Survey of 2011, more specifically on the measures that concern innovative activities, it is suggested that the respective eco-innovation indicators be added according to Table 6 below. We emphasize that the table aims to furnish subsidies for the debate about the incorporation (or not) of eco-innovation indicators in research conducted in Brazil.

Table 6 – Measures of innovative activities – eco-innovation indicators.

Measures of Innovative Activities	Description	Scale
Internal R&D	Comprehends the creative work, undertaken systematically, with the objective of increasing the **collection of knowledge related to environmental aspects** and the use of this knowledge to develop new applications, such as **new and/or substantially improved product in which the global impact on the environment is minimized**, and **new and/or substantially improved processes of the productive system aiming to fulfill some sustainable principles such as reduction in the consumption of water, energy, raw material, emission of gases and waste**. The design, construction and testing of prototypes and of pilot installations often constitute the most important phase of the **environment-oriented R&D activities**. Also includes the development of software, providing this involves a technological or scientific advance **associated with environmental matters.**	What is the importance of the **environment-oriented R&D activity,** carried out in the research execution period? **(We initially thought of a Likert four-point scale)**
Acquisition of machinery and equipment	Acquisition of machinery, equipment and hardware, specifically purchased for the implementation of **new and/or substantially improved products and processes that aim to decrease the global environmental impact.** However, if the acquisition of this machinery and equipment were preponderantly for the performance of R&D activities, both their importance and their expenditure should be considered in R&D.	What is the importance of the acquisition of **environment-oriented** machinery and equipment, made in the respective period? **(Likert four-point scale)**
Training	Training geared towards the development of **new and/or significantly improved products and processes that aim to decrease the global environmental impact**, and related to the innovative activities of the company, which may include acquisition of external specialized technical services. However, if this training has been preponderantly for the	What is the importance of training in environmental technique learning systems, held between the respective period? **(Likert four-point scale)**

	performance of the R&D activities, both its importance, and it expenditure, should be considered in R&D.	

Source: Prepared by the authors from the Brazilian Institute of Geography and Statistics (2012), Santos, Basso and Kimura (2012), Kemp and Arundel (1998) and Lázaro et. al. (2008), Almeida (2008) and Oltra, Kemp and Vries (2008).

In Table 6 the input measures aim to evaluate the eco-innovative activities of the firm, represent the company's efforts with the purpose of improving its collection of technologies with environmental considerations, and consequently, for the development and implementation of new and/or significantly improved products, services and processes. For this purpose the eco-innovative activities will be measured with a basis on three eco-innovation indicators, namely: i) environment-oriented internal R&D; ii) acquisitions of machinery and equipment; and iii) training. It is also worth emphasizing that each eco-innovation indicator uses a four-point scale (*Linkert*). The eco-innovation indicator environment-oriented internal R&D evaluates the effort of eco-innovative activities of the firm aimed at the development of knowledge related to environmental matters; the indicator measures its degree of importance through the respective scales: high, medium, low and did not develop. The eco-innovation indicator acquisition of machinery and equipment has the purpose of evaluating their level of importance to the development of new and\or substantially improved products and processes that aim at lesser environmental impacts, using the four-point *Linkert* scale (high, medium, low and did not develop). Finally, the eco-innovation indicator training that seeks to verify whether training programs aim at innovation with environmental considerations, covering both the productive process (by means of cleaner productions and reductions in the use of raw materials) and the manufacture of products (reducing environmental impacts during their use); the training indicator is evaluated by means of a four-point scale (*Linkert*). It is worth emphasizing that, besides assessing the importance of these eco-innovative activities, it is also necessary to include the amount of expenditures allocated to each activity.

Santos, Basso and Kimura (2012) used the relational capital index (which to avoid further discussions can be built from a resource, as declared by the Resource Based View, which identifies the company's ability to relate externally) in their study. According to these authors, the index aims to analyze the externalization of activities related and unrelated in R&D. Actually, this index outlines the behavior of Brazilian companies; according to the results of the study, Brazilian companies tend to subcontract activities related to the R&D area. The relational capital index can be measured via eco-innovation indicators, which address both the acquisition of environmental management systems software and design of products considered "green" and\or "ecological", and the acquisition of knowledge involving ecology-oriented products and processes (KEMP; ARUNDEL, 1998; LÁZARO; et. al., 2008). Based on the form of the Technological Innovation Survey of 2011, more specifically on the measures that concern innovative activities, we submitted the incorporation of eco-innovation indicators for discussion in order to evaluate the relational capacity, according to Table 7.

Table 7 – Relational capital measures – eco-innovation indicators.

Relational Capital Measures	Description	Scale
External acquisition of Research and Development	The **environment-oriented** R&D activities carried out by another organization	What is the importance of the external acquisition of **environment-oriented** R&D made in the respective period?

	(technological companies or institutions), and acquired by the company.	(*Likert* four-point scale)
Acquisition of software	Acquisition of (design, engineering, processing and transmission of data, voice, graphs, videos, for automation of processes, etc.), specifically purchased for the implementation of new and/or substantially improved products or processes **that aim to decrease the global environmental impact.** Not include those recorded in R&D. However, if the acquisition has been preponderantly for the performance of **environment-oriented** R&D activities, both their importance, and their expenditure should be considered in R&D.	What is the importance of the acquisition of **environment-oriented** software, made in the respective period? (*Likert* four-point scale)

Source: Prepared by the authors from the Brazilian Institute of Geography and Statistics (2012), Santos, Basso and Kimura (2012), Kemp and Arundel (1998) and Lázaro et. al. (2008).

The relational capital measures informed in Table 7 encompass two eco-innovation indicators: i) external acquisition of R&D; and ii) acquisition of software; they aim to measure both the firm's capacity in transactional activities, more specifically in the acquisition of external environment-oriented R&D and of software, and their importance to the development of new and\or substantially improved products and processes aimed at the reduction of the global environmental impact. The eco-innovation indicator environment-oriented external R&D evaluates the degree of importance of the acquisition of this knowledge to the development and the implementation of new and/or substantially improved production systems and products that attend to environmental matters, and is measured by means of a four-point scale (*Linkert*).

The human capital index that estimates the level of qualification of the staff allocated to the R&D area is measured based on the number of doctors, masters, specialist and graduates (SANTOS; BASSO; KIMURA, 2012). In the specific case of eco-innovation, the human capital index will not only measure the degree of qualification of the staff allocated to the R&D area, but will also evaluate the number of staff allocated to the specific development of processes and products with environmental considerations. Considering the form of the Technological Innovation Survey of 2011, more specifically in the measures that concern internal activities (R&D), it is suggested that eco-innovation indicators be added to evaluate human capital, according to Table 8 below.

Chart 8 – Human capital measures – eco-innovation indicators.

Human Capital Measures	Description	Scale
Location	Indicates the location of the company's **R&D department with exclusively environmental concerns** or, if there is no formal unit or more than one, where the **R&D activities with an exclusively environmental concern** are predominantly concentrated.	Percentage of activities with environmental concerns, carried out in the respective period **(Likert four-point scale)**
Degree of qualification	Aims to identify the staff allocated to the **environment-oriented R&D (meaning: environmental concerns)** in a stratified manner, according to academic background.	Company staffing structure, normally occupied in the **environment-oriented** R&D activities, and according to the level of qualification. (Mapping: doctors, masters, specialists and graduates). Inform the number of **environment-oriented** projects **(Classify the number of environment-oriented projects in relation to the total number of projects)** The time dedicated to **environment-oriented** activities.

Source: Prepared by the authors from the Brazilian Institute of Geography and Statistics (2012) and Santos, Basso and Kimura (2012).

The objective of human capital (Table 8) is to assess how deeply the organization is engaged in environment-oriented projects by means of two eco-innovation indicators: i) location; and ii) degree of qualification. The eco-innovation indicator location measures the degree of importance of activities geared towards environmental matters at the company, which can be measured using the four-point scale (*Linkert*) (high, medium, low and not relevant). The eco-innovation indicator qualification is measured through three aspects. The first maps out the degree of qualification of the people involved in research and development of products and of new and\or substantially improved processes with environmental considerations. The second is a relationship of the number of environment-oriented projects in relation to the total number of projects developed by the company, aiming to identify the company's engagement with environmental matters. The third and last aims to identify the degree of importance of dedication of human capital to environment-oriented activities (by means of the time dedicated to these, using a four-point *Linkert* scale).

Finally, the AIR measures the performance arising from innovations, and is composed of the Patent Index (PI) and the Economic Impact Index (EII) (FURTADO; QUADROS, 2006;

SANTOS; BASSO; KIMURA, 2012). The patent index aims to identify the different methods that Brazilian companies adopt in order to protect and prolong the benefits of their innovations, using both legal protection and strategic methods; in order to be able to incorporate eco-innovation indicators we suggest the eco-patent index. An eco-patent consists of the detailed description of an innovation and its relationship with environmental gains (OLTRA; KEMP; VRIES, 2008; KEMP; PEARSON, 2008; ARUNDEL; KEMP, 2009). According to Oltra, Kemp and Vries (2008), eco-patents can be measured through the respective ecological indicators, which are: i) estimate of eco-patents; ii) share of eco-patents; iii) technological specialization index; iv) knowledge and value of the eco-patent; v) diversification; vi) market; vii) patent portfolios; the economic index impact will be based on financial metrics such as the ROE, ROS and Profit Margin, aiming to appraise the organizational performance in the presence of eco-innovations.

Figure 13 provides a summary of the main indices and their respective eco-innovation indicators (suggestion for discussion). The conceptualization of each index (construct) was suggested in the previous sessions.

Figure 13 – The eco-innovation indicators considered in the Eco-Innovation models.
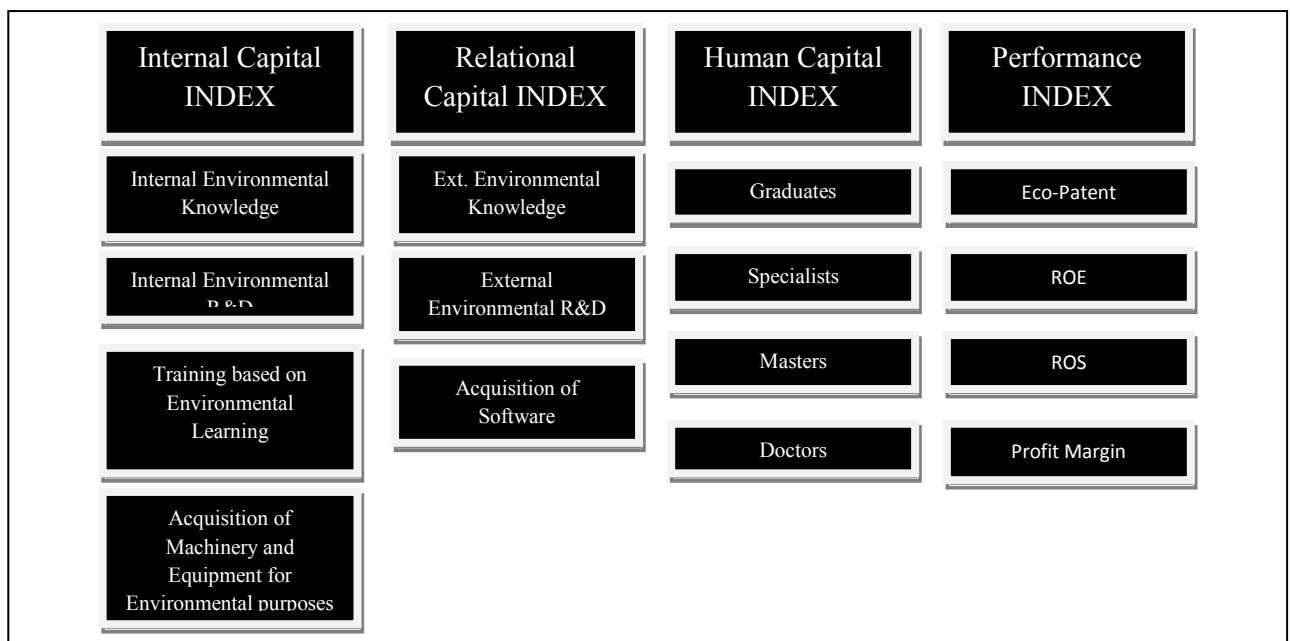
Source: Prepared by the authors from Kemp and Arundel (1998), Lázaro et. al. (2008), Almeida (2008), Oltra, Kemp and Vries (2008), Brazilian Institute of Geography and Statistics (2012) and Santos, Basso and Kimura (2012).

4 FINAL CONSIDERATIONS

The proposal of this study was firstly to perform a review of the international literature on ecological aggregates, also called eco-innovation indicators.

The Technological Innovation Survey was examined presenting the three main firm-level analysis measures: input measures, output measures and impact measures. We made a comparison between what is being done in Brazil and abroad in relation to eco-innovation indicators.

We presented the Brazil Innovation Index (IBI) and a suggestion aiming to incorporate eco-innovation indicators in the Technological Innovation Survey so as to enable us to assess the firm's capacity to eco-innovate.

If on the one hand we can highlight the effort made by the Brazilian federal government to promote research that facilitates both the development of innovations within the scope of the firm and the development of technologies that allow the transition to the green economy, and on the other hand we highlight the concern of Brazilian researchers with incorporating eco-innovation indicators in research performed in Brazil, there is still a long way to go. The objective of this article was to furnish subsidies for the discussion of the relevance of the inclusion of eco-innovation indicators in research carried out in Brazil.

We believe that there is a pressing need for extensive debate about eco-innovation indicators, both conceptually and quantitatively (measurement process), for indicators (constructs) to be incorporated into the Technological Innovation Survey, and for the Brazil Innovation Index to have a session dedicated to eco-innovation.

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Leonardo Fernando Cruz Basso

Saving the Euro: Creating Social Regional Currencies, Taxes on Financial Transactions, and Minimum Income Programs

Abstract:

This paper proposes the creation of regional currencies, which we call social currencies (pesetas, dracmas, liras; deutsche mark) with the finality of financing minimum income programs and microfinance programs in Europe.

The backing for this currency will be Euros collected based on the creation of taxes on regional financial transactions.

Depending on the tax rate the amount of money collected can be substantial and can be used to buy to buy government bonds of countries with severe funding problems.

Keywords: Tobin tax; social currencies; quantity theory of money; minimum income; basic income; taxes on regional financial transactions.

1. INTRODUCTION

In all the proposals that we have read so far to solve the European crisis, not one submitted what we believe to be an essential element: the creation of regional currencies, which we call social currencies; the name could be better but what we have in mind with this name is that this currency includes an essential social component, which is job creation; there is nothing new with alternative currencies that circulate side by side with the national currencies of countries with monetary problems, and this has already occurred in Brazil with the creation of social currencies of restricted circulation, as well as in Argentina, when the population lost its confidence in a currency subjected to ongoing and significant devaluations.

These currencies should reflect three features: the first is that the exchange rate should devalue against the euro, as one of the latter's problems is that it prevents competition by countries with less productivity, as we have already argued in an article (Basso, 2005) on exchange rate parities (criticizing the Brazilian real / US dollar exchange rate which was at the origin of the real plan); the second is that these currencies are of a transitory nature and will become extinct when economic conditions improve in European countries; the third is that as opposed to what happened in countries that created social currencies (where creation and emissions were private) creating and issuing will be under the control of central banks in order to prevent counterfeiting and unrestricted emissions.

The backing for this currency will be Euros collected based on the creation of taxes on regional financial transactions. We put forth a similar proposal in a previous article but our concern in that text was to collect funds in order to put in place a minimum income program for those people affected by unemployment; currently the focus is another, as the social currency is intended to reactivate the economy as well as to fund a minimum income. The second essential component in our proposal is the creation of a minimum income for those affected by unemployment; this minimum income would be funded by social regional currencies, issued in accordance with each country's needs; this would not be inflationary for two reasons: recent events in the United States have raised a query on the expertise of defenders of the quantity theory of money (significant emissions do not result in significant inflation); frugal emissions give rise to product increases (consumer goods in this case).

The second essential component in the proposal is the introduction of regional financial transaction taxes, because we have found that countries such as England will veto the creation of a Tobin tax for the whole of Europe; this tax, as found when implementing the CPMF (provisional contribution on financial transactions) tax in Brazil, has an excellent collection potential depending on the tax rate, and may provide funds to partially remedy problems with budgetary deficits, reducing the debt / GDP ratio to satisfactory levels. The Brazilian experience shows that there is nothing destabilizing about enforcing this tax.

Implementing this tax should form part of a broader proposal to regulate financial resources in European countries (the most appropriate expression would be regulation of financial resources), as the very much commented solution for the social welfare state did not occur.

2. DIAGNOSIS

Replacing national currencies by Euros was one of the European Union's relevant events, as it allowed countries to prepare a group of policies to preserve the currency's stability, while at the same time avoiding the detrimental effects of solving problems at the expense of neighbors. Nonetheless, the fact that there are economies with different productive bases (such as Germany, one of the world's most powerful economies, and Greece, which depends on its agricultural base) leads to productivity being widely different and affecting competitiveness in a number of fields in different nations. This fact has led nations to use the public sector to solve short-term problems, forgetting that only a competitive productive base will be a definite solution for their problems. Recurring public deficits to drive the economy will always charge a price if they are not followed in the long run by an increase in the government's tax basis, as has occurred now; moreover, this increase can take place only if the economies are able to compete to create revenues. This is equal to wishful thinking if the economies do not work in improving productivity, which can only take place by changing the productive base and with recurring investments.

3. THE PROPOSAL

Let us assume that a country has income that can be spent by consumers, equal to 100 Brazilian Reais per annum.

Let us also suppose that circulating this income through banks could result in the public sector collecting 10 Brazilian Reais per annum as contributions on financial transactions (a simplified version of the Tobin tax). This contribution is nothing more than the provisional contribution on financial transactions (CPMF) that existed in Brazil's and Argentina's tax systems; the provisional contribution on financial transactions could be converted into a

permanent contribution on financial transactions (we will preserve the same acronym to name the permanent contribution).

Let us assume that in order to back all of this anti-hunger currency, from now on named citizenship currency, the CPMF would be adopted, and the most that the government could print in this currency would be 10 Brazilian Reais, in other words, a monetary unit of the citizenship currency would be equal to one unit of Brazilian currency, the real.

Table 1 illustrates what would happen, proving that no currency would be created. As the poorer people do not have bank counts, this plan is certainly an income reallocater.

We will describe in detail the process's complete steps.

To begin with, the Government will issue the equivalent of 10 Reais in citizenship currency and transfer (1) to the impoverished (although this is an important discussion topic, it is not in our scope here to discuss which of the poor will have priority treatment; the issue is complex, as an individual with a scarce income may be in worse condition than an individual not connected to the market economy, such as an Indian or an inhabitant of the Amazon region who makes a living from natural resources).

The sum transferred in this first plan should be equal to the sum collected through the permanent contribution on financial transactions (CPMF).
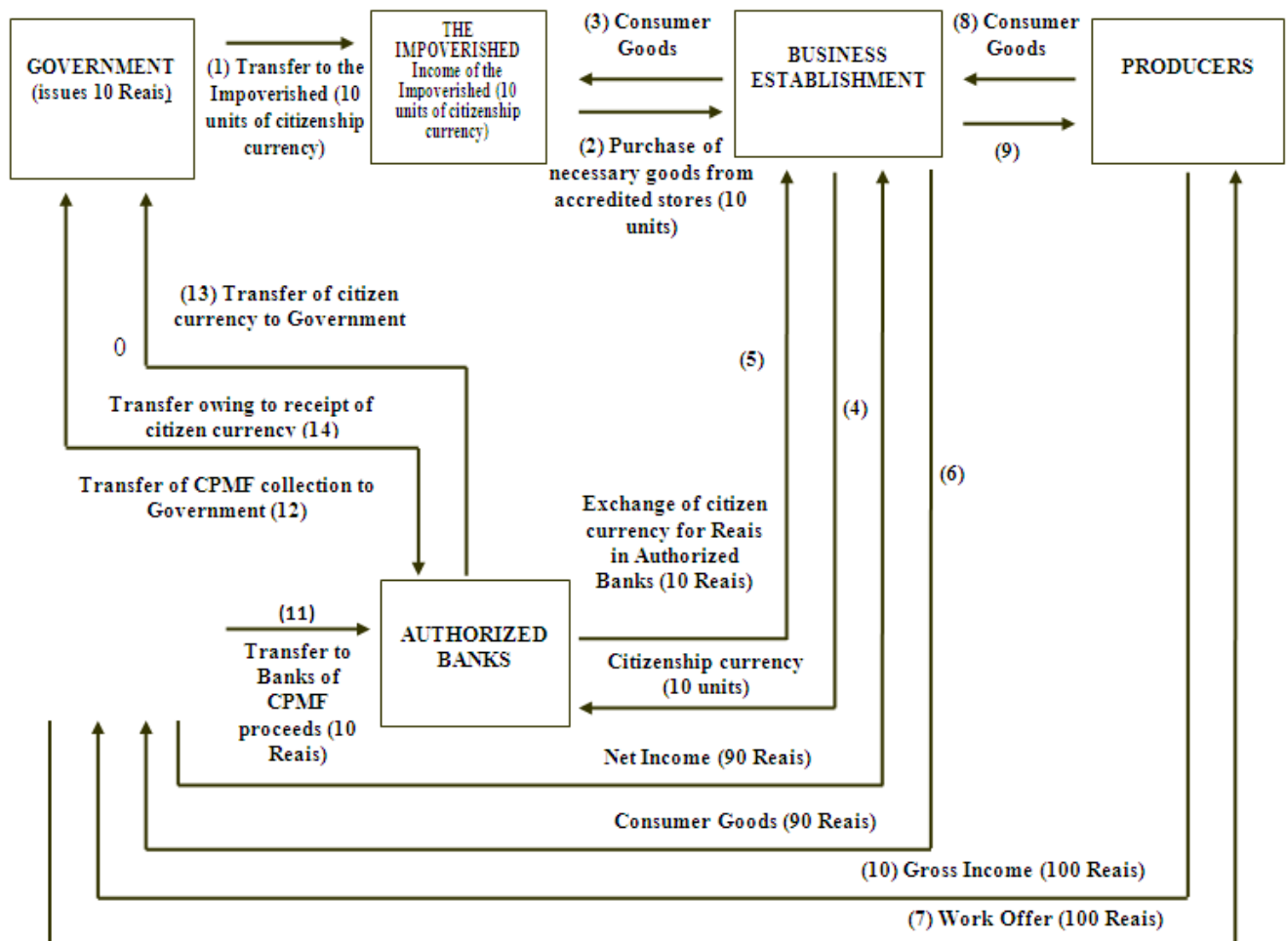
I. Figure 1: Issuing and Circulating Social (Citizenship) Currency (Leonardo Basso)

In order to simplify, we will assume that one unit of citizenship currency is equal to one real.

To start with, this currency could be spent on food only (this assumption will discarded further on, with an argument in favor of expenditures with consumer goods, whether or not durable, or even any other kind of goods).

The unemployed having in hand a sum due to them will go to stores that sell food, (2) which would retain the food currency while at the same time transferring consumer goods to the unemployed (3). These stores will exchange the citizenship currency for CPMF tax collection in financial institutions (4) and (5).

The population with income, which at the start had 100 Reais in income, now has available 90 Reais with this income's financial transactions and the taxation on it (CPMF). The population uses up the 90 Reais in consumer goods in the retail stores (6).

The population's income originates from the provision of work to producers totaling 100 Reais (7), who produce consumer goods totaling 100 Reais. The reader, who was brought up under the principles of a classic economy, might inquire why we omitted the creation of value in production, one of the greatest discoveries of classic economists. This was done in order to simplify the reasoning, but no producer would produce if the value going into the productive process is the same resulting from the same process.

Producers sell consumer goods totaling 100 Reais to retail stores (8) and receive 100 Reais, (9) which is used to pay for the work by the population with income (10).

The banks will be in charge of retaining the CPMF funds due by the population (11).

They transfer to the Government the citizenship currency obtained from the retailers (13) at the same time that they transfer the CPMF funds to the government (12) and receive 10 Reais for transferring to it the citizenship currency (14).

Under the proposed plan, the only two unilateral transfers take place between the Government and the impoverished, and the population and the banks.

For all other transfers the path has two ways, i.e.: money is transferred from one point to another in the system, at the same time that goods or work are involved in the opposite direction.

Money issued by the Government, which is equal to creating legal tender, is offset by withdrawing income from the population through the CPMF.

It could be argued that as the money was issued before taxation, there is a likelihood that this plan is inflationary, but in truth taxation occurs during the same time span as issuing, so offsetting exists.

Albeit the currency emission is prior to taxation of the population, increased expenditure due to the excess currency (equal to 110 Reais) giving rise to a price increase, would be offset by a subsequent downturn in demand for money (equal to 100 Reais), leading to a decline in prices.

This first plan is extremely stringent, forcing retail stores to go to the banks to exchange citizenship currency for CPMF funds. This would avoid the creation of legal tender.

A milder alternative may be visualized in the structure of the "barter market" in Buenos Aires. This market, not really a barter market, arose as a result of the crisis that has overcome Argentina, where the unemployed need to exchange what they produce over a period (flow of wealth produced) and even a part of their acquired wealth (stock of acquired wealth) in order to meet their basic needs (an expression with a connotation broader than satisfying hunger). Each participant in this market receives a number of credits, depending on what he/she has to offer.

With these credits in hand, the person will search for the goods required, validating with payment (using credits) the private labor embodied in other goods.

As the credits are widely accepted and can validate private labor, they serve as a general equivalent and are therefore legal tender.

The difference of what occurs in this market and the use of citizenship currency in the first plan is that now validation is broader, including not only wealth produced over the period but inventories from previous periods, which raises the question of what would happen with the citizenship currency's value in connection with the Argentine peso (or the real if the plan were to be introduced into Brazil).

In Argentina's case, the "barter market" has already replied.

One credit unit is worth two pesos, confirming in fact what economists who believe in productivity as the exchange rate's determining factor have already demanded for a long time: The peso's devaluation vis-à-vis the US dollar.

We would not run the risk of increasing the discount, producing inflation in the citizenship currency.

Not if the number of credits (i.e.: the citizenship currency) can be kept under control and regularly exchanged in banks, in accordance with a discount specified by the market.

If the goods could be exported, the discount would make the goods produced for bartering more attractive than those in the formal economy, quoted in Argentine pesos.

A third more daring plan consists in the creation of a citizenship currency and allowing loans to be made in this currency, provided that they were granted under micro-credit programs, to expand the supply of food. We can use Milton Friedman's argument to demonstrate why this plan is not inflationary.

4 SEVERAL COMMENTS ON THE QUANTITY THEORY OF MONEY

The simplest version of the quantity theory of money may be expressed as:
In which:

$$M.v = P.Y$$

M = stock of means of payment, i.e.: paper money in the public's possession plus its sight deposits in commercial banks.

v = the currency's velocity of circulation

P = a price index, and in the case of the entire economy, the product's implicit deflator

Y = index for real product

This equation may be converted into a dynamic equation representing variations in time.

The variables may be named:

$$\frac{\Delta M}{\Delta t} \cdot \frac{1}{M} = \widehat{M}$$

$$\frac{\Delta P}{\Delta t} \cdot \frac{1}{P} = \widehat{P}$$

$$\frac{\Delta Y}{\Delta t} \cdot \frac{1}{Y} = \widehat{Y}$$

$$\frac{\Delta v}{\Delta t} \cdot \frac{1}{v} = \widehat{v}$$

And considering a constant velocity of circulation, we will have the equation:

$$\widehat{M} + \widehat{v} = \widehat{P} + \widehat{Y}$$
$$\widehat{M} = \widehat{P} + \widehat{Y}$$

Based on the scenario expressing the relation between gross domestic product and the amount of currency required to achieve this, we can devise at least five theories.

Three theories are devised based on the additional assumption that the velocity of circulation is constant and that the cause of inflation is an increase in the volume of money in the economy (the currency is the root of price rises).

The first of these, which we might name short-term Friedmanian, provides that the additional stock of currency will be divided between a price rise and an increase in real product. Acting prudently, the volume of currency may be increased in the same proportion as real product estimated growth. This increase may be provided by social (beneficial) currency. We might argue that short-term growth will not imply inflationary pressures if expenditures come together with increases in the gross formation of fixed capital, creating additional goods and services.

The second theory, which we might name Keynesian recessionary, upholds that an increase in supply will impact real growth only, as in depressed economies the monetary stimulus will not produce inflation as the first reason is to recover the economy from a depression (or recession). There is a parallel between this theory and what is currently happening in Europe and the United States, with massive currency emissions to recover both continents from a recession. As upheld by the Keynesian theory, expressive currency emissions may not impact on product should the process occur known as the liquidity trap. Even when unrestricted currency is available, families will not spend should they feel a threat of losing their jobs during a recession, and businessmen will not invest if they do not foresee generous times ahead to sell the goods resulting from their investments.

The third theory applies to situations in which the economy uses a significant enough portion of productive capacity and is close to full employment. In this situation, increases in the supply of currency will result in price rises as it is not possible to increase product.

A fourth version of the quantity theory assumes that the chief cause of price rises is a currency increase, but changes the velocity of circulation. This seems to be the expectation by the US, expressive increases in the volume of currency are not being converted into inflation, due to a change in the currency's velocity of circulation in a direction opposed to the increase in the volume of currency.

Under the same scenario, there are two more theories that change this cause and effect relation. We might name them Marxist and Keynesian.

In both of them, increases in the volume of currency arise from price rises and greater quantities.

Keynesian theories explain prices with mark-up theories. Once mark-ups and quantities for production are decided, products (gross domestic products) will be determined (prices multiplied by amounts). Products determine the volume of currency to realize them. Should the amount of currency be sufficient to make products, the velocity of circulation will not change. Should the amount of currency prove insufficient, the velocity of circulation will rise. Should the amount of currency be excessive, this will affect the currency's velocity of circulation. What distinguishes Marxists from Keynesians is the micro-economic theory that explains price levels, with Marxists adopting the labor theory of value and Keynesians using the surplus theory based on goods (Sraffa) or the utility value theory.

In summary, there are several theories advocating that an increase in the amount of currency is not inflationary, and these theories support the creation of social (beneficial) currency.

5 THE TOBIN TAX

The funds for a stricter plan of creating a social currency (without issuing any amount of currency) would originate from a Tobin tax.

There are a number of versions of a tax on financial transactions, implying various amounts in proceeds. One version involves taxation of foreign exchange markets(Kapoor,2004). Our purpose here is not to discuss the best form of taxation on currency transactions, but to argue in favor of a successful one, the CPMF's effectiveness in Brazil with a relevant collection of funds. The CPMF is a tax applied to any financial transaction within the country. The volume of funds collected may be significant depending on the tax rate, with the advantage of not requiring international agreements to be enforced. As England did not enact the Tobin tax, the solution is found in domestic CPMFs. This tax is certainly regressive, as its rate is incident on all income brackets. I uphold that this tax is of a nature that supplants the disadvantage of a regressive nature, with its implicit dimension of solidarity; all of a country's inhabitants should be granted the means of eliminating hunger, and this is a task for all of a country's inhabitants.

6 THE USE OF MONEY

Tobin's initial proposal was to reduce the volatility of international capital flows, considered in the past to be destabilizing (Basso, Pinho, Silva, 2001).

We now know that capital flows are much more difficult to control when the prospects of returns are spectacular. We give an example: one of the explanations for the sub-prime crisis in the United States sustains that the huge deficits in the US balance of payments caused the crisis. The huge deficits led to incoming funds by means of the capital account, which led to growing investments, consumer spending, and indebtedness by families at levels not compatible with a balanced position.

We can foresee expenditures of the Tobin tax in numerous activities, depending on the problem we wish to grasp.

a – implementation of a minimum income program: countries suffer the impact of crises in different manners; Spain is undergoing extremely high unemployment rates; in this case the proceeds would be allocated to minimum income programs;

b – incentives to change the energy matrix: some forms of energy are deemed to be too expensive; an example is solar energy; some countries such as China are able to produce equipment for using this form of energy much more cheaply than those produced in western countries; the funds would be employed to subsidize acquisition of this equipment, still considered expensive; these funds could also be employed to produce this equipment in western countries at prices subsidized by the Tobin tax;

c- micro-credits to organize small businesses: minimum income is effective over consumer activity; an alternative is to encourage the formation of gross investment capital by small entrepreneurs, with a view to job creation;

d – changes in transport infrastructure: this is an extremely necessary use of funds in emerging countries such as Brazil (and other Latin American countries), which ignored railway transportation.

I will explain with an example.

Table 1 reflects a series of revenues that we deem relevant to fund railroad transportation (taken from an end-of-course paper by Karine Bincoletto (2010). The first column shows current revenues for two metropolitan regions in the state of São Paulo (Campinas and São Paulo). As these are two very populous regions, the sums would be employed to fund the railroad system in these regions. The percentage in question will be 1%.

The second column reflects taxation on motor vehicles. As vehicles contribute to degrade air quality, the percentage in question will be 10%.

The third column refers to revenues from the state of São Paulo's value-added tax (ICMS tax). As the railroad system produces positive externalities, 1% of the entire state's revenues will be allocated to build the system in two regions. The fourth column shows a Brazilian version of the Tobin tax (CPMF – provisional contribution on financial transactions). In Brazil the tax rate was high (0.38%) and we allocated 21% to build the railroad system, which represents the state of São Paulo's share in Brazil's population.

An alternative step was the idea of using a portion of the state of São Paulo's IPVA (motor vehicle tax) revenues to reactivate railways. The idea is to allocate 10% of this tax to build the São Paulo – Campinas railroad. As for the ICMS tax collected in the state of São Paulo, 1% of its value will be employed in the construction. With regard to the ICMS tax, a sum was calculated to be allocated to the state of São Paulo if the criterion were based on population. And by means of the figures found, it is possible to calculate how many kilometers could be built by means of these three methods.

Table 1: Percentage of sums from sources of funding *– (data in Brazilian Reais for 2008) (Bincoletto, Karine Simone: Reactivating the railroad system in Brazil: costs and alternatives for funding; end-of-course paper, Universidade Mackenzie, 2010*
* 1% of current revenues by the municipalities in the metropolitan region of São Paulo and Campinas for 2008; ** 10% of the sum collected by the state of São Paulo for 2009; *** 1% of the sum with regard to the state of São Paulo for 2009; **** sum equal to 21% of the total CPMF, the state of São Paulo's percentage share in the country' population.)

	CURRENT REVENUES*	IPVA**	ICMS***	CPMF****
TOTAL	42,463,513,954	8,789,600,000	77,202,300,000	36,483,000,000
PERCENTAGE	424,635,140	878,960,000	772,023,000	7,661,430,000

Table 2 demonstrates costs per km of three kinds of railway transportation, monorail, light rail vehicle, and high-speed train.

Table 2: Costs per km for the three railway modals *(Bincoletto, Karine Simone: Reactivating the railroad system in Brazil: costs and alternatives for funding; end-of-course paper, Universidade Mackenzie, 2010.)*

COST PER KM	
MONORAIL	R$ 75 MILLION
LRT	R$ 66 MILLION
HST	R$ 67.7 MILLION

Lastly, table 3 gives an approximate idea of how many kilometers could be built, and was obtained by dividing the contribution from each source (current revenues, ICMS, IPVA CPMF) by the cost per km for each kind of railway transportation (as an example, with 1% of current revenues we could build 6.4 km annually for a light rail vehicle, 6.3 km for a high-speed train, and 3.3 km for a monorail.

Table 3: Estimate of kilometers built for each kind of railway transportation. *(Bincoletto, Karine Simone: Reactivating the railroad system in Brazil: costs and alternatives for funding; end-of-course paper, Universidade Mackenzie, 2010)*

	MUNICIPAL CURRENT REVENUES	IPVA	ICMS	CPMF
LRT	6.4 KM	13.3 KM	11.8 KM	116.1 KM
HST	6.3 KM	13.0 KM	11.4 KM	113.2 KM
MONORAIL	5.7 KM	11.7 KM	10.3 KM	102.1 KM

These sums evidence that the option for rebuilding the railroad system is more political than financial, as funding can be obtained.

Use of the four sources of funding (in amounts that could be supported by the municipalities and the state government) would allow building 147.6 km of light rail vehicle tracks, 143.9 km of high-speed train tracks, and 129.8 km of monorails.

As we have upheld that the production of commodities embodies in the system's own concept the likelihood of crises, because all goods need to perform their *salto mortale*, we consider it prudent to include other forms for the system to function, apart from the production of commodities. To reduce the burden on public budgets, this great effort to rebuild the railway system could employ the work of the prison population in the state of São Paulo, which would earn less but on the other hand would have their sentences reduced, and could work as employees of public-private railroad systems.

There are other serious structural problems in Brazil, such as the system for gathering and treating sewage, which does not cover significant portions of the inhabitants of Brazilian cities and gives rise to a loss in environmental quality, as the waste is dumped in rivers; This is a problem that requires an urgent solution and the proposal outlined here could contribute with part of the funds (Basso, Pinho, Silva,2001).

7 CONCLUSIONS

If there are funds to rescue and save banks (salvage financial capital), there should be funds to save persons. As the socialism that we know has killed individual liberties and created brutal dictatorships (the Soviet Union, Cambodia, east European countries) that took the lives of millions of people, and capitalism has proved to be a perverse system that has created millions of unemployed and progressively degrades the environment, the need arises to think and propose alternatives to partly replace the production of commodities, that as Marx showed brings in its conception the likelihood crisis. The plan outlined is a proposal in this direction.

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Leonardo Fernando Cruz Basso

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Diógenes Bido

Herbert Kimura

The Existence and Disclosure of Intangibles versus Corporate Financial Performance in France

Abstract:
Aiming for superior performance, companies need to have and skillfully use rare, valuable, irreplaceable and inimitable resources, with special emphasis on intangibles, constructed in lengthy and risky processes or strategically accumulated via Mergers and Acquisitions (M&A). To analyze how financial performance, after 36 months of M&A, is related to the previous existence/disclosure of intangibles, we investigated one hundred and seventy-seven companies were in fifty-nine cases of M&A occurred in France among 1997 and 2007. We built textual-based indicators of disclosure and we used financial measures of intangibles existence to compare their explanatory power for growth and corporate profitability (performance dimensions analyzed). Using Structural Equations, via Partial Least Squares (SEM-PLS), we find positive relationships among these indicators, validating the strategic option for the M&A.

Keywords: intangibles; disclosure; textual-based and financial indicators; mergers and acquisitions; financial performance; Structural Equations, via Partial Least Squares (SEM-PLS).

BEST PAPER AWARD

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Nuran Bayram

Nazan Bilgel

A Structural Equation Model of Job Satisfaction, Burnout, Vigor and Depression: A Study from Turkey

Abstract:

The aim of the study was to investigate the relationships among job satisfaction, burnout, vigor and depression among academic staff in Turkey. The study participants ranged in age from 23 years to 67 years, approximately 53% were female, 69% were married. The Minnesota job satisfaction scale, the Shirom-Melamed burnout and vigor measure, and Lovibond´s depression scales were used. Printed questionnaires were sent to the entire academic staff of a single academic institution and were filled out anonymously. The results were X2/df = 2.684 .

Gokhan Bolat

Russia's Attitude Towards the Iranian Constitutional Revolution and Its Support of Counter-Constitutionalism

Abstract:

Russia was one of the two states that dominated Iran in the beginning of the 20th. century. In 1907, the territory of Iran was divided into three zones among Russia, Britain and the Qajar Dynasty. The northern part of Iran was under the Russian dominance. Due to weakness of the central government, that is the Qajar adminstration, Russiaand Britain had great influences on Iran´s political, economic, and military conditions. In a word, the Qajar Shahs became nominal monarchs of Iran. However, the Constitutional Revolution (Mashrutiyat) that started in 1906 alarmed Russia. Therefore, the Tsarist Russia supported Mohammad Ali Shah and other counter-constitutionalist forces in order to protect her interests. To thwart the Consitutional Revolution, Russian appointed colonel Vladimir Liakhov as commander of Persian Cossacks Brigade. Liakhov gave an order to shell Majlis-e Melli (The National Assembly). However, in reaction to this, the rebel forces in Tabriz and some other parts of Iran united against Mohammad Ali Shah and his army. Tabriz rebellion took about 8 months. In July 1909, pro-Constitution forces marched from Iran' s province of Azerbaijan towards Tehran and deposed the Shah and, consequently, re-established the constitution. Mohammad Ali Shah fled to Odessa, Russia. He plotted his return to power from Odessa. In 1911, with Russian support, he landed in Iran but his forces were finally defeated. Mohammad Ali Shah again fled to Russia. Russia, with the support of Britain invaded Iran in 1911. Based on British archivs, Persian, and Turkish sources, this article gives a detailed analysis of the Russian attitude towards the Iranian Constitutional Revolution.

Marta Bozina Beros

Marin Beros

Regulating the Global Financial System: a Cosmopolitan Approach

Abstract:
Every financial crisis transforms the manner in which we perceive global finance, its governance and institutional organization. In this regard the last financial turmoil was no exception, as it made policymakers and academics worldwide agree on the fact that the global financial system was flawed at many levels, the institutional, political and unfortunately ethical. The crisis did not result from a specific failure exogenous to the system, but rather it was a product of the system itself: its organization, principles and institutional structures. Consequently, in a post-crisis environment the global financial system is once again under scrutiny, with many questioning its institutional set up and regulatory governance. Global finance today is akin to a football game at the beginning of the 19th century. Before rules were stipulated, consequently establishing the division of football and rugby, there were no predetermined limits to the number of players, or to your behavior in the sports field you could kick the ball (and sometimes the opposing player) any way you liked, even causing major injury at times. Probably the game was enjoyable even in then, but in the end, would you rather participate in that kind of competition or in its modern day version? Henceforth, what transformed the game of football were two simple things: commonly agreed rules and judges who enforced them. To return the analogy to the world of global finance: if we want the markets to be more fair, that is, beneficent for the larger part of the world´s population, as opposed to today´s negligible few, where can we find a foundation for that change? And if we do find it, how are we going to agree on a set of global rules that would be obligatory for all? Finally, who should supervise their enforcement? Against this background, the paper analyzes the theoretical and normative approach to a cosmopolitan regulation of global finance. Our main premise is that the global financial system started operating on the principles we could consider cosmopolitan long ago, but the regulatory architecture that is supposed to moderate its effects remained essentially national, and therefore somewhat useless. The question is how to circumvent this paradox? Do we need to change how global finance operates or do we need to change its regulation? The answer is simple a little bit of both. By discussing the present state of global financial governance, its inherent caveat of the globalization paradox, that is the discrepancy between cosmopolitan markets and national political communities, as well as the theoretical underpinnings offering a solution to this challenge. The paper goes beyond purely economic cosmopolitanism in suggesting a more appropriate regulation of global finance: one that would mitigate the instabilities of the global economy and allow a more just development of the whole humanity in the future.

Agnieszka Budziewicz-Guźlecka

Information in Enterprise Development on the Polish Market

Abstract:
Information is an economic resource essential to the functioning and development of any society, state and national economy. This resource, along with other economic resources, shapes the development of the society and the economy. It is an essential resource for the development of enterprises. Currently, we are in a network civilization or information civilization, and the new economy is shaped by this civilization. The development of that civilization is determined by advanced technologies, especially in the field of transfer of information.
The article presents the techniques of information transmission in companies operating on the Polish market.

1. Introduction

Information is an economic resource essential to the functioning and development of any society, state and national economy. This resource, along with other economic resources, shapes the development of the society and the economy[2]. It is an essential resource for the development of enterprises.

Currently, we are in a network civilization or information civilization, and the new economy is shaped by this civilization. The development of that civilization is determined by advanced technologies, especially in the field of transfer of information and management of information and knowledge.

The civilization breakthrough is related to the process of functioning of the economy based on knowledge, which is becoming a strategic resource for all levels of management. Transfer of knowledge, the aim of which is to increase innovation in enterprises, is of paramount importance nowadays. Currently, it is not tangible, but intellectual capital that is crucial for the development of organisations and is the primary factor of their success.

2. Knowledge-based economy

The New Economy is a concept that is used to highlight the two main determinants of competitive advantage based on knowledge: globalization and the latest information technology. It is associated with the use of electronic technologies for the creation, acquisition, storage and use of information, and furthermore – knowledge, in order to gain and maintain competitive advantage. [3]The amazing technical and technological progress, which allows for the transmission of information, and globalization are the two phenomena

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[2] A. Toffler: *Future Shock*, Warsaw, 1974.

[3] A. Budziewicz-Guźlecka: *Management of changes in enterprises as a form of adaptation to e-economy.* Scientific Journal nr 681, Service Management vol. 8 Szczecin 2012, p. 200.

and the two forces that shape changes in all spheres of life in the twenty-first century. Information issues are at the centre of attention. The New Economy is distinguished by the role of information, rapidly developing information and communication technologies, and globalization.

The basic characteristics of the knowledge-based economy include:[4]

1. In knowledge-based economies, a high percentage of the GDP is spent on education, research, intellectual services, and on information and communication products and services. The result is a high level of education and the widespread use of modern information technology;

2. knowledge-based economies are characterized by well-developed infrastructure, particularly information infrastructure;

3. knowledge-based economies are characterized by a high level of transaction security and mutual trust between market participants. This is due to the legal regime and efficient law enforcement system;

4. the market for knowledge-based industries is a global market. This applies both to its products, as well as the basic production factor, which is knowledge. Competition in this market is global and it is dominated by global players and their coalitions. Thus, knowledge-based economies are open economies. This applies, to the maximum extent possible, to markets for services, goods, capital and labour. Highly competitive markets guarantee low prices and costs;

5. development of products and knowledge-based enterprises is largely the result of entrepreneurship;

6. knowledge-based economies are based on solid macroeconomic foundations. This means low inflation and sustainable public finances.

Assumptions of the model for building knowledge-based economy in Poland are presented in Table 1.

Table 1. Assumptions of the model for building knowledge-based economy.

Level	Tasks:
National level	- coordinating the building of a knowledge-based economy at the government level (establishing a position and an institution coordinating and choosing directions for development of knowledge-based economy), - creation of a coherent education policy for the economic actors, - changes in training programs to support the knowledge-based economy, including continuing education, - framework training programs for managers and employees (taking into account the size of the enterprise, industry) - development of IT and telecommunications infrastructure (including providing widespread access to the Internet), - increasing investments in the R & D sector, - development of innovation.
Local government level	- establishment of a development council (representatives of the local administration, business, education, non-governmental organizations), - establishing a research and development position (coordination of activities in the community and the county, integration of business

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[4] See: A. K. Koźminski: *How to build a knowledge-based economy? The development of the Polish economy*, Edited by G. Kołodko, Polico-Art Publishing House, London, 2002, pp. 157-158.

	and scientific environments, identifying potential), - creating conditions for building a knowledge-based economy in the region (relief for companies investing in research and development, business partner programs - scientific centres, research grants), - training to stimulate awareness of the impact of the concept of knowledge-based economy on the economic development of the region, - conducting workshops and debates.
Enterprise level	- general training for owners and CEOs (costs and benefits of implementing system solutions in the field of knowledge management in enterprises), - specialized training for leaders of knowledge management in enterprises, - specialist instruction and training for employees.

Source: B. Powichrowska: *Knowledge management model in small and medium-sized enterprises. Knowledge-based organization. Materials for study*, Ed. B. Powichrowska, Higher School of Economics, Białystok, 2011, p. 112.

The implementation of a coherent policy requires coordination between the government, local government, the society and enterprises.

3. The essence of information and knowledge

Possessing knowledge opens access to other resources and enables wealth-generating activities. "because only people are able to extract added value hidden in the resources". Information (and the knowledge tied to it) is becoming, in addition to land, labour and capital, the fourth, and very important, factor of production. In the age of globalization and the Internet, knowledge is a resource, a wealth, and capital all at the same time.

The pace of economic changes now taking place and the processes and phenomena occurring in the changing environment, imply, or even necessitate the need to understand the nature and the great importance of harnessing knowledge. Today's organizations that want to survive and have a chance for further development, should value knowledge as a key strategic resource. This implies the need to develop and implement a knowledge management system in each area in which the organization operates, as an integrating process, which determines the degree of achievement of the adopted strategic objectives.

It is important to distinguish the basic concepts, such as data, information, knowledge and wisdom, which in the ordinary sense are often treated as synonyms. However, these concepts are very different.

Data is the narrowest concept and has a subordinate position in relation to information and knowledge. Data is defined as facts unconnected with each other. In the context of an organization, data signify a formalized record of transactions. In other words, data are raw, unanalysed facts, figures and events from which it is possible to draw information. Clean, unprocessed data are of little practical importance in business. Traditionally, data management consists in the analysis and selection of data made from the point of view of their production costs, speed – the time between the occurrence of a fact and its formal registration and quality – the extent, to which they are useful in making decisions. Development of technology and the computerization of enterprises going in its wake, greatly facilitate and accelerate data management processes. On the other hand, they pose a temptation to collect too much unnecessary data.

Information means data that have been categorized and classified or have been otherwise ordered. Information is data presented in a way that gives it a certain meaning or interpreted in the context of a particular purpose. The primary role of information is to change the way in which the recipient sees things. Thus, information affects the recipient's judgment and behaviour, which distinguishes it from data. Information is data after it has been processed in such a way that, as a result, it becomes meaningful, carries specific knowledge and ideas, and allows drawing conclusions. After the processing, it becomes useful and can affect the quality of decisions.

Knowledge, on the other hand, is organized, "clean" information. It arises only after drawing conclusions from the available data and information. In contrast to data and information, knowledge is intuitive, which makes it more difficult from them to define and analyse. Because knowledge is derived from people and is located in people's minds, it is something as complex and unpredictable as people themselves. Having a wealth of knowledge on a certain topic leads, in turn, to wisdom. Hence, wisdom is the use of knowledge in practice. The value of information is determined by people, who are able to assess the reliability of the transmission, to use the available messages, to identify the problem and take appropriate actions.[5]

Knowledge is viewed as a flexible substance which is the result of mental processing of information that a person possesses.[6] Information and data can be easily collected and processed by means of computer systems, while in the case of knowledge and wisdom; IT systems are used primarily to support learning and communication (sharing) of knowledge. Knowledge is dynamic; it is becoming the most sought-after product and capital. This is so because all has its origin in the minds of people, their attitudes, sensitivity, cognitive limitations, competence, and motivation system. Knowledge is more than information, as it is embodied in people. Knowledge is the domain of humans, not machines. Of particular importance for today's service providing enterprises is the intellectual capital comprising of highly educated workers with the knowledge and skills to design modern technologies, to organize production and provision of services, as well as methods and management techniques to enable the fulfilment of customer expectations. The increasing complexity, dynamics and discontinuity of the environment, expansion of its borders and the increasing impact that it has on the fates of companies, necessitates the need to acquire, process and use more and more information within less and less time. Rapidly changing environment forces companies to focus strongly in order to achieve competitive advantage through unconventional and innovative behaviour.

Information can be seen as an element of competitive advantage, and, at the same time, as the source of this advantage. Starting with the essence of competitive potential as defined by M. J. Stankiewicz, information can be perceived as an important resource for getting the benefits expected by the stakeholders in the company.[7] It is vitally important to treat information (often in conjunction with the obtained knowledge) as one of the elements of the strategy raising for the efficiency and effectiveness of the organization.[8]

The most important thing is to properly understand the nature of knowledge and thus acquire the skills to gain, develop, and to use it efficiently and effectively. Knowledge should be equated with the concept of competence and understood in terms of efficiency as the effective retrieval and use of information relevant from the point of view of the organization.

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[5] A. Drab-Kurowska, *E-commerce in modern economy*, 12th International scientific conference globalization and its socio-economic consequences, Uniwersytet w Żylinie, Żylina 2012, p. 158.

[6] *Fundamentals of corporate governance in a knowledge-based economy*, Ed. B. Mikula, A. Pietruszka-Ortyl, A. Potocki, Difin, Warsaw 2007, p. 113.

[7] M. J. Stankiewicz: *Enterprise competitiveness. Building enterprise competitiveness in a global economy*, Dom Organizatora, Toruń, 2005, pp. 91-93.

[8] B. Gulski: *Evolution of enterprise competitiveness management*, Modern Management, 2006, No. 4, pp. 122-134.

Transmitted information should be useful and it is necessary to conduct effective communication, so that the information may be used effectively. "Between cognition and action, there are different mental processes that result from the perception and interpretation of messages and preparation for making choices, taking decisions and actions"[9]

4. The essence of the use of information and knowledge in enterprises

Achieving success associated with the use of information requires an appropriate level and the ability to manage this resource. Information can be considered as the enterprise's most important resource, contributing to its development. However, to fulfil its tasks, it should be characterized by parameters sufficient to recognize that it:

- is accurate, i.e. reliably reflects reality
- is up to date, i.e. available in time for appropriate action,
- is complete, i.e. provides all the facts and details necessary to make decisions,
- is appropriate, i.e. provides useful information with regard to the current needs and reaches the persons who need it at a given time,
- is distributed depending on the position and function in the organization, and depending on how significant and how up-to-date is the source and the addressee,
- shows the current status of the organization, complemented by its future image,
- provides an accurate and comprehensive picture of all the supplier's requirements, and sanctions the needs and expectations of the customer.[10]

Knowledge management, popularized by Ikujiro Nonaka, means the systematic creation, dissemination and use of non-material factors in the enterprise. The basic assumption is that people who perform certain tasks have easy access to useful knowledge in the form most convenient to them. However, knowledge-based economy is an economy in which there are many businesses, the competitive advantage of which is knowledge-based.

Both information and knowledge in the organization pass through the same structures, but they serve different functions, and adopt various forms. Wisdom and knowledge are always embodied in a person; they are acquired by the person learning and are used by that person. Knowledge can be divided into the following categories:

- know-what knowledge – takes a similar form to information and can be transmitted with data,
- know-why knowledge – explains the reality and refers to the principles and laws of motion, requires an understanding of the basic principles, rules and concepts,
- know-how knowledge – refers to the skills and abilities of people and teams to do something, not covered by patents and licenses, but necessary at the time of transfer of technology, this type of knowledge requires direct experience,
- know-who knowledge – defines the knowledge holders and describes the knowledge that is in their possession, also refers to the social ability to cooperate and communicate with external experts, it is useful when there is a need to access knowledge from different areas, fields, or disciplines.

As a resource in a company, knowledge is characterized by:

- difficulty to determine ownership,
- continuous dissemination,
- lack of means of measurement or valuation.

The difficulty to determine the ownership of knowledge as a resource is mainly due to the fact that the holders of knowledge are usually people, who can move between companies.

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[9] L. W. Zacher: *Transformation of societies from information to knowledge*, C.H. Beck, Warsaw, Poland 2007, p. 230.
[10] Based on: M. Marcinkowska: *Formation of enterprise value*, PWN, Warsaw, 2000, pp.154-155.

Therefore, it is so important to reward the holders of knowledge appropriately as long as they account for the competitive advantage of the enterprise. In addition, knowledge is a resource that continuously spreads, because it is widely available, owing to which it has to be constantly replaced with new. It is necessary to bear expenditure on renewal of knowledge and its continuous improvement, due to the fact that inadequate, e.g. outdated, knowledge, yields results contrary to those expected. Knowledge cannot be valuated, because there are no common methods or ways of determining the value of knowledge.

Among other results, introduction of knowledge management in the enterprise leads to:

- improving communication,
- accelerating the decision-making process,
- increasing business innovation,
- accelerating the development of a rich product portfolio,
- reducing the time to solve key problems,
- improving the efficiency of the company on the market,
- increasing the competences of employees,
- broadening of the knowledge of employees.

Practical application of ICT in recent years has had a significant impact on the changes in the rules of business management. On the basis of considerations by P. Drucker[11], some new paradigms in the twenty-first century can be formulated:[12]

- there exists not one, but many ways of organizing business. Businesses should be able to undergo continuous metamorphosis and to adapt to changing conditions. These changes can only be effective when they are based on accurate information and knowledge about the environmental conditions is delivered in a timely fashion by an efficient IT system;

- there exists no single best organizational structure for an enterprise; there is a best structure for the current moment. Companies today must deal with the need to continuously change their structures depending on the situation. The tool that allows such a level of flexibility is information technology. The effectiveness of flexible adaptation of the organization to the changing environment is always a function of the institutional knowledge possessed by the company;

- a prescriptive system based on the assumption that the superior has more knowledge than a subordinate is now in flagrant contradiction with reality. Managing employees in the old system is no longer applicable. A large amount of information and universal access to information by employees at all levels, for example in applications of ERP systems, means that subordinates must know a lot more, as part of their scope of activities, than their superiors. The cores of operations in any business of the future will be provisional groups of experts gathered around a job with a set budget and deadline;

- as opposed to the traditional understanding of management, the central object of interest for managers should not be the company as such, but its surroundings. This comes as a result of a huge increase in the dynamics and volatility of the business environment. Shift of the manager's focus from the company to its external environment is made possible by the standardization of business processes and their being supported by IT systems. Repeatable and stable business processes enable efficient application of information technology and allow the manager to devote attention to areas in the company's environment. Therefore, data warehouses are designed to generate the same amount of knowledge about the company as about the external environment;

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[11] P. Drucker: *Management Challenges for the 21st Century*, Harper Busines Publishing, New York 1999.

[12] T. Wielicki, B. Skibicka: *New paradigms in business management knowledge-based economy*, [In] *The knowledge-based organization. Materials for the study.* Ed. B. Powichrowska, Higher School of Economics, Bialystok 2011, p 101-102.

- development of the company is supported by exploration of opportunities at the interface between different technologies and markets. Exploration of hybrid technological solutions, mixed technologies and the changing needs of the market requires many tools in the field of efficient data collection, information generation and modelling. Such tools are offered by advanced management information systems and knowledge management systems.

Competitive advantage based on knowledge can be perceived in different ways. It is related to knowledge, both technical and scientific, which is used by the enterprise, although usually not created by the company itself. "Competitive advantage lies in mastering applications, which in itself is knowledge and a secret of the company. It requires investment of financial and intellectual capital, and is not widely available, although it may be copied by other companies, incurring much less effort."[13] However, if such imitation is in place, the benefits are lesser, since the competitive advantage gained in such a way is usually more short-lived. Approach to competitive advantage based on knowledge in a broader sense is when the meaning of knowledge is extended onto all the useful information that the company possesses on an exclusive basis and which can be used to achieve or strengthen competitive advantage.

5. The use of technology in enterprises

Knowledge management tools include:[14]

☐ document management systems – allow for the collection and classification of documents in an efficient manner, making it easier to access them later and make amendments;

☐ workflow systems – aim at supporting the implementation of procedures for the handling of documents, knowledge bases and mechanisms for extracting information contained in these systems are used to collect the materials necessary to create content;

☐ group work support systems (groupware) – allow free movement and sharing of knowledge. They are used to improve collaboration and thus the creation and transfer of knowledge between particular employees. They provide access to the information resources of the organization to each of its employees, allowing them to engage in interactive discussions;

☐ data warehousing – are databases that contain information from multiple sources. They support decision-making processes in the company;

☐ decision support systems – these are interactive computer systems used to perform the planning functions and decision-making;

☐ Intranet – a network of web pages on the company's servers; allows employees of the organization to obtain information held by the company and to exchange existing knowledge. This significantly reduces the time required to search for the necessary data, and speeds up the circulation of knowledge within the organization and the organization's responses to external stimuli. Additionally, the intranet can be connected to the Internet;

☐ corporate portals – allow to collect and organize information from virtually any data source present in the organization in one place and provide access to it via a web browser;

☐ search engines – make it easy to find the desired information by sharing thematically arranged web directories;

☐ infomediary – technologies that help to determine what type of information is preferred by the user, based on the addresses of visited web pages[15];

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[13] A. K. Kozminski: *How to build a knowledge-based economy? The development of the Polish economy*. Edited by G. Kołodko. Polico-Art. Publishing House, Warsaw 2002, p. 155.

[14] See: A. Sobczak: *IT tools to support knowledge management in public sector institutions*. http://www.egov.pl/teksty

[15] See: K. Owczarek: *Knowledge management - the concept of a company of the future*. p. 3, http://www.strateg.edu.pl

☐ intelligent agents – special software to associate people with the knowledge available both on the Internet and on the enterprise intranets. Based on messaging, the software learns about the user's interests and on that basis it finds the information most desirable by the user;

☐ methods for imaging knowledge spheres – information retrieval technology, which, by visualizing connections between information, involving the analysis and identification of the relationships between all the documents on a given topic creates "smart content", so that later, by using appropriate inquiries it can offer, and actually suggest the users the information that they need;

☐ cloud computing technology[16] – also referred to as cloud computing processing can be defined as the use of external or internal infrastructure of the organization for the purpose of data processing. Using the infrastructure is a service that can be purchased by interested entities.

There are five models of delivering "cloud computing" services[17]:

Software as a Service (SaaS), where the user, via e.g. Internet uses applications, but does not control the operating system, hardware, or telecommunications network;

Platform as a Service (PaaS), where the required hardware platform is provided by the supplier along with the whole environment required to run the appropriate applications;

Infrastructure as a Service (IaaS), where users gain access to basic hardware resources such as processors, memory, disks, etc.;

Communication as a Service (Communications as a Service - CaaS), where a platform is provided to be used for communication between users;

Software plus Services (SplusS) is a combination of applications running on the user's computer with services operating in the cloud, that is on a server located in any location.

ERP systems – Enterprise Resource Planning – a computer system of applications that integrate business processes at all levels. ERP systems cover all processes in the company and make it possible to optimize work in many areas of the business from finance through human resource management to logistics and production.

The problem with ERP systems is their high cost, especially when it comes to software, and a high degree of complexity. For this reason, these systems, which many large corporations can afford today, are still beyond the reach of the financial capabilities of small and medium-sized enterprises. This exclusiveness of ERP systems is one of the dimensions of digital exclusion in business[18]. It must be assumed that companies already having extensive computer systems and staff knowledgeable in the use of ICT tools, which, at the same time, usually have large financial capabilities, enjoy both:[19]

- facilitated entry conditions to undertake e-business
- special abilities to implement comprehensive e-business concepts involving the use of electronic solutions in all phases of business processes, requiring electronic channels to communicate both in the business-environment setting, and for internal interactions between employees of the company.

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[16] The term "cloud computing" was defined by "The National Institute of Standards and Technology" in the USA as a model for access to customizable IT resources, where the fee is collected for the degree of their use. These resources include servers, networks, archiving and storage of data, software, computing power, etc. R. Buyya, J. Broberg, A. Goscinski: *Cloud Computing. Principles and Paradigms*, John Wiley and Sons, New Jersey, 2011, p. 4.

[17] N. Antonopoulos, L. Gillam (ed.): *Cloud Computing. Principles, Systems and Applications*, Springer, London 2010, p. 5.

[18] T. Wielicki, L. Arendt: *A Knowledge Driven Shift in Perception of ICT Implementation Barriers: Comparative Study of U.S. and European SMEs*, Journal of Information Science, 2010 No. 36, p. 162.

[19] M. Czaplewski: *Knowledge as a resource conditioning the introduction of e-business solutions by companies*, [In] *The knowledge-based organization. Materials for study*, Ed. B. Powichrowska, Higher School of Economics, Białystok 2011, p. 160.

Information systems have been functioning in business for a long time now. So far, however, they have been used to improve existing practices. Only the inclusion of those systems in an integrated, global network - such as the Internet - creates a new quality. Any organization, large or small, has the ability to operate a business on an international scale. The wealth of information and the ease of online shopping offer customers enormous capabilities. Knowledge can spread rapidly over large distances. Progress and economic growth has always been a product of the human mind and of technological innovations. Access to information and the knowledge of what information means, is the basis for development, including economic development. A new business environment arises, in which information and knowledge, through ICTs, are becoming fundamental decisive criteria that determine the success or failure of companies, regions, and entire economies. Information and knowledge provide added value, increase productivity and management efficiency. [2]

6. The use of ICT in enterprises in Poland

Since 2007, the rate of enterprises with Internet access across the country had been rising, reaching a level of 96% in 2010. Among large companies, it remained at almost the same level over the last four years (almost 100% in 2009). The biggest progress has been observed among small businesses, which, as is the case with the number of available computers, had the least access to the global network. Since 2007, the rate of Internet access among small businesses increased by 5 percentage points, reaching 91% in 2008. In 2009, there was a slight decrease of 3 percentage points, while in 2010 the rate rose to 95%[20].

In subsequent years, the importance of Intranet and Extranet increases, which is presented in Table 2. In 2009, the number of companies that communicated by those means was 28% and 10%, respectively. In 2010, there was a significant increase of 43% in the case of Intranet and 15% for Extranet. As with most these rates, the use of Intranet and Extranet is dominated by large companies (59% and 27% in 2009, respectively). It is understandable not only for economic reasons, but also practical, e.g. because of the need to communicate more information between the company and its subsidiaries, suppliers, and customers.

Table 2. Use of Intranet and Extranet in enterprises.

Enterprises	2007	2008	2009	2010
Intranet				
Total	32.9	26.1	28.2	42.7
Small	27.2	22.1	24.7	39.2
Medium	50.8	37.0	40.0	52.5
Large	68.4	55.0	59.2	70.0
Extranet				
Total	7.1.	7.3.	9.9	14.6
Small	4.8	5,8	8.1	12.0
Medium	13.7	11.3	15.7	21.0
Large	25.7	19.0	26.8	36.9

Source: *Information Society ...*, op. cit, p. 44.

Intranet access rate among enterprises in Poland in 2009, compared to the European average, was lower by only 2 percentage points. A larger difference is evident in the use of the Extranet, which amounts to 8 percentage points.

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[20] *Information Society in Poland. Statistical results from the years 2006-2010*, Information and statistical studies, Warsaw, 2010, p. 21.

In 2009, in European countries, on average every other worker used a computer at work. Among the leading countries in which the percentage of employees who use a computer is highest are Finland (70%) and Sweden (68%). Poland's position has increased compared to 2008 by 3 percentage points, but still this is a fairly remote place. In the case of computers with Internet access, Denmark (64%) and Finland (63%) are ranked higher, while in Poland the ratio is about half that.[21]

According to a report on the use of information and communication technologies, 43% of Polish companies do not have their own websites. This figure consists mainly of small businesses, which normally use computers. 88% of them have access to the Internet, and 15% make purchases and sales on the web. These companies still do not appreciate the value of having their own website.

The vast majority of large enterprises, employing more than 250 employees have their own web address, as the figure reaches 88.2%. Among medium-sized enterprises, employing up to 50 workers the figure is 79.2%. The lowest percentage is among small businesses, employing up to 50 employees. Only 51.9% of such companies have their own website. In Europe, the average rate for companies with their own website is 67%.[22] Enterprises having their own website are presented in the table below.

Table 3. Companies with their own website by size.

Enterprises	2007	2008	2009	2010
Total	53.2	56.5	57.4	65.5
Small	46.7	50.1	51.9	60.5
Medium	74.9	77.2	79.2	81.6
Large	86.8	88.1	88.2	90.7

Source: *Information Society ...*, op. cit, p. 34.

Analysis of selected data, defining the purpose of the use of the Internet shows greatest interest in the use of on-line services in dealing with public administration. This type of activity is usually performed by large enterprises. In 2009, 99% of them contacted the public administration through on-line means, while small enterprises did so less often - 87%. Little less attention was devoted to online banking and financial services. From 2006 to 2010 the percentage of enterprises benefiting using those services increased by 18 percentage points. Growth dynamics was inversely proportional to the size of enterprises. The lowest interest can be seen in training and education via the Internet.[23]

Most enterprises used their websites to promote their goods and services. In 2009, 42% of companies in Poland advertised on the web in this way. (table on p. 37-38) Analysis of the indicators listed in Table 5 on the use of web pages in 2009, showed that the highest value was recorded for the presentation of catalogues or price lists (42%).The rarest web

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[21] *Information Society ...*, p. 29.

[22] http://biznes.gazetaprawna.pl/artykuly/411823,tylko_polowa_polskich_firm_ma_wlasna_strone_www.html For comparison, in 2009, in European countries, 64% of companies had their own website. Differences between countries were quite significant, e.g. Romania - where only 28% of enterprises had a website, and Denmark, located on the top of the list, where 88% of businesses had a website. Poland was ranked in the middle with 57%.

[23] *Information Society ...*, p. 32. For comparison, in 2009, European countries named banking and financial services (79%) as the main purpose of using the Internet, especially significant in Estonia (93%), Lithuania (93%) and Slovenia (91%). There are considerable differences among European countries in the field of on-line training and education. Among the 24 European countries presented, this kind of education enjoys the greatest interest in Lithuania (55%), Greece (46%), Romania (46%) and Slovakia (46%).

functionality was their personalization – 6%. Taking into account the size of the enterprises, however, it can be seen that large companies deviate from the country's major trend, as they rarely dedicated web pages for on-line ordering or booking services – 9%. Also, in division by sections, most website were used in order to present catalogues or price lists, while, depending on the industry, personalization pages for regular users and on-line ordering or booking services were in the last place. In 2010, the situation was similar, with the exception of large enterprises, which, just like other groups, used personalized web pages for regular users the least.

Internet as a communication tool certainly has a lot of added values in comparison to other media. It is not only a medium of communication, but also creates a plane of social reality, which allows for interaction and the creation of social and business relationships.

The variety of technologies used for communication by employees of companies is presented in the table (table 4) below.

Table 4. Various technologies used for communication by employees.

Type of communication	%
Mobile phone	73.2
Landline phone	56.3
E-mail	48.4
Text Messaging	15.6
VoIP phone using a computer	7.2
VoIP phone using a landline phone	5.7
VoIP phone using a mobile phone	5.7
Teleconferences	5.2
Videoconferencing	4.7

Source: www.uke.gov.pl. p. 68,

The most frequently used communication technology is mobile telephony - it is used by 73.2% of employees in the companies surveyed. Landline phones are used by 56.3% of employees, and e-mail by less than half (48.4%). In one-sixth of the companies (15.6%) employees use text messaging, and in 7.2% of companies they communicate through VoIP technology using computers.

The reasons for using the Internet by employees are presented in the table below.

Table 5. Reasons for using the Internet by employees.

Reason	%
Internet is necessary for work	67.6
Searching for necessary information related to work	54.8
To communicate with customers (e.g. by e-mail, instant messaging)	36.1
Employees use the Internet for private purposes	22.8
To communicate with other employees (e.g. by e-mail, instant messaging)	17.8
To use online dictionaries	11.9

Source: www.uke.pl, p. 75

Most respondents answered that to the employees in their companies, the Internet is essential for work (37.2%). The second reason for using access to the network is searching for necessary information related to work (30.8%), and the third reason is communication with

customers (19.9%). In 12.9% of the companies surveyed the Internet is used for private purposes. In 9.9% of enterprises, the Internet is used for internal communication. Using online dictionaries was mentioned by 6.9% of the surveyed enterprises.

In 2009 and 2010, the issues of using ERP and CRM information systems were examined, as presented in the table below.

Table 6. Enterprises using ERP systems.

Enterprises	2009	2010
Total	9.3	11.3
By size		
Small	5,4	6,6
Medium	20.1	22.0
Large	53.8	57.9

Source: Information Society ..., op. cit, p. 56.

In 2009, only one in ten enterprises in Poland operated an ERP system, with a similar percentage in 2010. The national average was significantly exceeded in 2009 by companies operating in the production and distribution of electricity, gas and heat (26%). The figures were similar in 2010 (29%). Enterprises in the construction industry showed the lowest interest in ERP systems in 2009 among all (3%), but in 2010 their share increased to reach the level of 5%.

The increase in the importance of information as a production determinant is influenced by the following factors[24]:

☐ globalization of access to information, with the ability to search for and use information, it is possible to customize products and services to meet the needs of other countries,

☐ rapid growth in the amount of available information,

☐ development of new information retrieval methods - selecting information that is actually vital without losing time to acquire information having no significance for the enterprise - provides a key competitive advantage,

☐ new ways of sending, retrieving and processing information have opened possibilities for revolutionary changes in work organization and management. World Wide Web services make it easy to find information stored on the network at any point of the globe.

All of this means that the appropriate use of information technology today can reduce the cost of production or services manifold, or increase their profitability, and allows for the timely production of personalized products, adapted to the needs of individual clients.

In the knowledge-based economy, factors of economic development, such as raw materials and labour, are gradually replaced by new factors, such as employees who can utilize information and knowledge, and IT infrastructure, as well as the circumstances created by the national authorities for the establishment and development of the new economy.

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[24] See: Selected aspects of the telecommunications market. Edited by H. Babis and W.M. Maziarz, Foundation for the University of Szczecin, Szczecin, 1999, p. 59.

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Dilek Caliskan

The Spirit of Rebellion:Ecotage, The War Against the Machines and Automatons in Edward Abbey's novel The Monkey Wrench Gang

Abstract:

The Spirit of Rebellion: Ecotage, The War Against Machines and Automatons in Edward Abbeys The Monkey Wrench Gang Edward Abbey as an environmentalist and a life writer uses crime and madness, in his novel The Monkey Wrench Gang in order to show the condition of the individual trapped in the hegemonistic capitalist American society, which has become schizophrenic. This violent patriarchal society does not only consume itself and its individuals, but also consumes nature both human and inhuman, so Abbey explains the necessity for sabotage which has nothing to do with terrorism. Terrorism he says means deadly violence for a political and/or economic purpose carried out against people and other things. He draws parallels to the government persecuting their own people, to bulldozers tearing up an area of trees and plants. Wilderness can only be defended through sabotage which , says Abbey, is an act of force or violence against material objects, machinery, in which life is endangered. Nature, as the sole treasure of the human beings is used and abused with the created myths and success stories about growth. Nature , the life giving source turns out to be monstreous and becomes the fountain of pain and trauma. With its focus on industrialism, the society with all of its institutions is like an evergrowing mega machine consisting of smaller political units controlled by the authorities and each unit controlling and dismembering the other. There is the necessity of opposition to the gigantic and fantastically complex social machine that modern nations have become. It is the American Dream that turned into a nightmare with people like Bishop Love, who is controlling the desert, the maze , ironically, the only place where the gang members felt themselves free. The aim of this study is to analyze the novel in the light of existentialist psychiatrist R.D. Laings definition of madness in order to understand the psychology of the gang members Seldom Seen Smith , Doc Sarvis, Bonnie and George Washington Hayduke, who refuse to become automatons. Abbey was a man in perpetual rebellion against himself, against the status quo, and against the mediocrity of the past that crushed the human spirit. It is the spirit what can be learned from Abbey and Hayduke the mad leader of The Monkey Wrench Gang. Wilderness is an important part of Civilization and must be preserved. The landscape made America uniqely American. The essential America has been for writers and critics exurban , green, pastoral, even wild. In American literature, nature was americanized and idealized and heroes were created to inhabit it. Hayduke, Smith and as well as Abbey are the animal like figures who inhabit the American ladscapes. They are like the indegenous people of North America, who learned how to survive in the wild American landscape by observing the living styles and techniques of the animals peculiar to that scene. Hayduke and Seldom seen Smith are heroic figures, like Edward Abbey himself. As, some of the heroes created themselves, calling on nature as a referent for their autobiographical self-definition. Sometimes the relationship between nature and narrator was harmonous. So, in Abbeys ecobiographical style ,the nature becomes an identfiying canvas on which to write a self. Abbeys desert, his solitude ,(his carefully constructed self). The desert must remain wild, indifferent, isolated, unpaved: closed

to tourists, although he himself hopes to return to it. Metaphorically, the mad Hayduke as the mountain lion, Seldom Seen Smith as the monkey and Abbey an antromorphic figure in an animal body in his self-portrait experience themselves as automata.

Jean-Marie Cardebat

Jean-Marc Figuet

Exchange Rate variations, Exports and Industrial Organization

Abstract:
The aim of this paper is to assess the impact of exchange rate variation on exports and, consequently, on industrial organization of exporters. The idea is the following: if exchange rate variations have an impact on export volumes of a considered what should be the reaction the exporters? This question raises another one: the price to market question. A conventional reaction for exporters should be to reduce the mark-up in order to maintain the local price (in the destination country) of the exported good. This reaction is traditional when exchange rate variations are regarded only as short term variations. When these variations are considered as long term moves, exporter reactions will concern their own industrial organization. A possible long term answer to exchange rate variations could then be to improve exported good quality, because higher quality goods are more expensive and their demand is less elastic to price variations. This strategy of market upgrading is non-neutral on firm organization. The rise in good quality is synonymous of increasingly demand for education and ability and is more favourable for graduated employees than for unskilled labour. Therefore, exchange rate variations could imply a deterioration of working conditions for low skill workers. In this paper we try to assess the first part of the previous assumption in the case of French wine exports and euro variations. OIV statistics (2010) indicate that the French market share (in volume) is at 15% in 2010 against 22% for Italy and 17% for Spain. The French market share has been in constant regression since 2000. It was previously at 25% and France was the world market leader. The French market position, which is a performance indicator, also decreases between 1990 and 2000 even if France remains leader. The idea generally defended by French producers is that the evolution of Euro / Dollar parity handicaps the wine exports. We then seek to determine if the Euro exchange rate impacts upon the French wine exports and the quality exported. Using an original database from FEVS (Federation des Exportateurs de Vins et Spiritueux) we apply a traditional Armingtonian approach in order to explain French wine exports and to assess the impact of the Euro exchange rate. The database covers exports from more than 300 French appellations to 7 countries (Belgium, Germany, Great Britain, United States, Japan, Hong-Kong, and China) during the period 2000-2011. First outcomes show that euro variations reduce French wine exports and that a quality adjustment from exporters occurs.

Maurizio Chiaranda

Sabrina Copelli

Vincenzo Torretta

Paolo Severgnini

Giordano Urbini

Analysis of Health-Epidemiological Risk Related to the Uncontrolled Abandonment of Municipal Waste

Abstract:

The authors report the results of epidemiological studies carried out in Campania, Italy, where for a very long time there has been abandonment of waste, causing an environmental crisis that has become chronic for over a decade, with exacerbations of such intensity as to cause concern serious repercussions on the health of the exposed population. An analysis of mortality data and of incidence of congenital malformations has highlighted higher risks in the municipalities included in provinces of Naples and Caserta. These data were analyzed in subsequent studies with a characterization of territorial attributes, using an index of municipal environmental pressure related to waste and a municipal index representative of the material and social discomfort of the population. The results suggest a possible role of exposures related to waste, even if it was not possible to establish the causality of the association detected and in-depth research should be required.

Marijan Cingula

Social Enterpreneurship and Social Thought of Church

Abstract:
Eternally open issue of entrepreneurial activities based on ethnical principles can be furthermore emphasized if development of social entrepreneurship is seen through influence of Catholic ethics. This paper shows social entrepreneurship as a developed form of entrepreneurship in which social care about common welfare is a complementation to economical components. Increased entrepreneurial responsibility is expressed in choice of activities as well as in way of conducting an entrepreneurial activity.

Maciej Czaplewski

Use of Internet sales channels in providing commercial insurances in Poland

Abstract:

The development of Internet and its economic use is a characteristic process of the contemporary economy. In Poland clear progress in the economic use of the Internet is noted in the provision of commercial insurances.

According to this facts the purpose of this article is to present:

-        susceptibility of commercial insurance services to the use of the Internet,

-        the reasons and strategies for implementation of Internet sales channels by insurance companies,

-        analysis of changes in how the Internet is being used by insurance companies functioning in Poland in the years 2006-2011,

-        benefits to the customers and insurance companies associated with the use of internet in commercial insurance services.

In this article the author used:

-        polish and foreign literature on commercial insurance market and the use of the Internet within this market,

-        statistics on Internet usage in the insurance market in Poland, presented by the various insurance companies and by the Polish Insurance Association,

-        own analysis of Internet usage by insurance companies functioning in Poland, showing the main changes in this regard that occurred between 2006 and 2011.

Conducted study allows to draw conclusions that companies operating in the insurance market in Poland are using the Internet:

-        to provide more and more types of services (e.g. travel, communication or house insurances),

-        in a growing number of phases of the insurance process, including pre-trade phase (e.g. presentation of the offer), the transaction phase (e.g. payment), post-transaction phase (e.g. completion of compensation).

Keywords: Polish insurance market, e-business

1. Introduction

Liberalization and globalization of markets and economic activities are characteristic economic phenomenas of of the last two decades. These processes lead to the opening of economies and increased competition both within individual countries and between various countries. An important factor that gives shape and dynamics of these processes is the progress in the flow of information and communication. Contemporary, practical expression

of this factor are, among other, modern information and telecommunication technologies and developing on its base e-business.

From an economic point of view, the development of e-business is largely the result of an global telecommunications liberalization, its globalization and the convergence of computing, which results in the possibility of creating broad access to a communication network with a homogeneous standard for voice and data transmission (TCP / IP)[25].

The insurance market is also a subjected to intensive processes of liberalization and globalization. After the transformation of the insurance market in Poland a large number of entities were allowed to operate on it. In the national laws governing the market adopted many regulations and directives applicable in the European Union relating to the functioning of both – the insurance companies, as well as to the whole insurance market.

Due to these changes, the insurance sector is currently one of the fastest growing areas of Poland's economy, which also has the resources and is interested to allocate them in the technological and organizational development, in particular in the development of information and communication systems. Speed and multidirectional character of changes in this sector is huge, and is associated largely with the use of the electronic medium of the Internet in the field of product policy, sales, maintenance and marketing of insurance companies.

These areas have the potential tendency to the use of e-business, especially due to the fact, that the use of electronic solutions creates conditions for the acquisition of new customers, strengthens customer loyalty, and in consequence allows to strengthen the market position of the company.

2. Provision of commercial insurance services

Insurance Company is a complex service organization whose overall objective is to create insurance cover, and its provision to customers. Given the scope of the activities of insurance companies, as a rule, they are classified according to the:
- statutory criteria, allowing to distinguish:
- insurance, reinsurance, as well as insurance and reinsurance companies,
- entities operating in the field of life insurance and non-life insurances (other personal insurance and property),
- organizational and legal criteria, separating:
- insurance companies,
- mutual insurance companies[26].

However, for the purposes of this article and according to the division contained in SwissRe Journal [Sigma, 2000, p. 34] it is particularly useful to distinguish:
- traditional insurers (such as PZU[27], Warta[28]),
- low-cost insurers (on the Polish market, as of now, it is difficult to clearly identify a specific example) and
- direct insurers (e.g. Link4).

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[25] TCP/IP – Transmission Control Protocol/Internet Protocol

[26] This is a rare form of organization. This kind of activity is encountered in case of providing insurance services only to certain professional groups, trade associations and/or insurance companies organized in local range. The purpose of action is not the profit, but to insure its members on a reciprocal basis.

[27] PZU is the incumbent insurer on the Polish insurance market, holding approximately 30% of it (as of the end of 2011) [PMT, 2012].

[28] Warta is one of the biggest players on the Polish insurance market holding around 8% of shares [Gazeta Wyborcza, 2011].

This specification allows the separation of objective insurance areas from the point of view of their sensitivity to the use of e-business, especially the Internet.

Companies belonging to the group of the so-called "traditional insurers" are trying to embrace all the main business areas and phases of insurance services. Therefore, the benefits of advanced e-business solutions implemented in such enterprises may be most visible.

In order to assess the possibility of the introduction of modern information and communication technologies in the field of commercial insurances, first it should be determined what are the functional areas of companies in this sector, which tasks do they take care of and how does a typical "production process" of an insurance product looks like.

The complexity of the insurance cover creation requires sharing of this task into smaller parts. W. Jaworski and J. Lisowski assume in simple terms that the business system of an insurance company covers four areas: underwriting/tariffs, sales, claims handling and investments [Handschke, 2004, p. 67; Handschke, 2006, p. 91]. On the other hand Kuhlmann distinguishes the following main areas of an insurance company [Kuhlmann, 2002, p. 5]:

- product development,
- distribution,
- administrative tasks related to insurance activities,
- the development of reported claims,
- finances.

These key functional areas of an insurance company and assigned to them competences and scopes of the most important tasks form a coherent whole, which graphically is shown in Figure 1.

Figure 1 Functional areas of an insurance company and their tasks
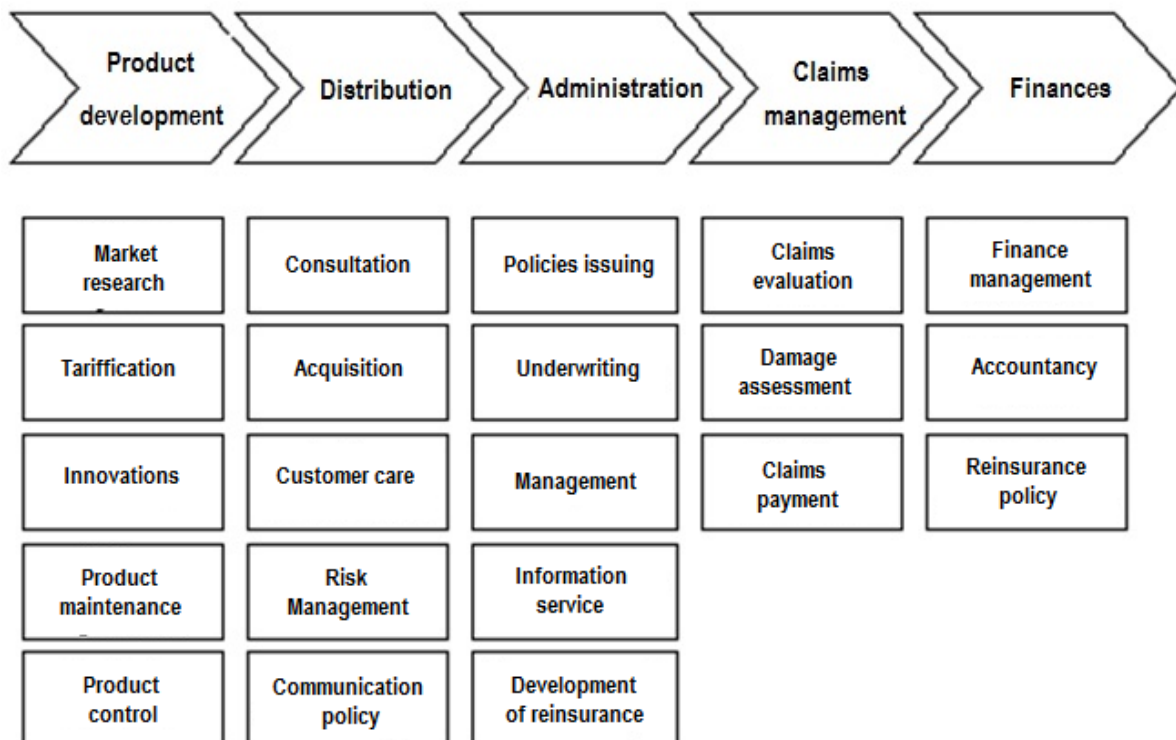
Source: [Kuhlmann, 2002, p. 13]

Shown in Figure 1 functional areas show an orientation aimed at internal structure of an insurance company. This structure must efficiently meet the requirement and the needs of

customers, or in other words, it must contribute to the development of products that best meet those needs.

Of course, competitive advantage is not only built with the final product or service, but in the whole creation process. G. Rosa shows, among others. the role of time management as well as the knowledge and information as factors of competitive advantage. [Rosa, 2005, p. 75]. Therefore, each activity carried out in the company should be analyzed especially in terms of opportunities for its improvement and development. [Bruhn, Stauss, 2004, p. 30]

3. The reasons for the use of the Internet in commercial insurance

Any company wanting to be successful in the market, should adapt their processes to the priorities of the customers.

Practice shows that nowadays customers priorities are functionality of the product in relation to its price, relative wide product portfolio, quality, eventual hassles minimization while providing adequate support and time-saving [Slywotzky, Morrison, Andelman, 2000, p. 363]. Offering services taking into account these priorities requires noticing the role of innovative techniques and technologies in their provision [Kurek, 2002, p. 152; Jaworski, Lisowski, 2002, p. 163], and needs investments in order to acquire such capabilities [Flejterski, 1998, p. 82; Dziawgo, 2005, p. 129]. In achieving such abilities Internet and executed on the basis of this network - e-business - can play an important role

The value to the client in case of Internet and e-business use can reflect in:
- the attributes of the product,
- image and reputation,
- relationships with customers.

Reference to this general approach of the potential value offered by the insurance company for its customers in the case of Internet and e-business use shows Figure 2.

Figure 2
Value offered to the customers by the insurance company in the case of Internet and e-business use
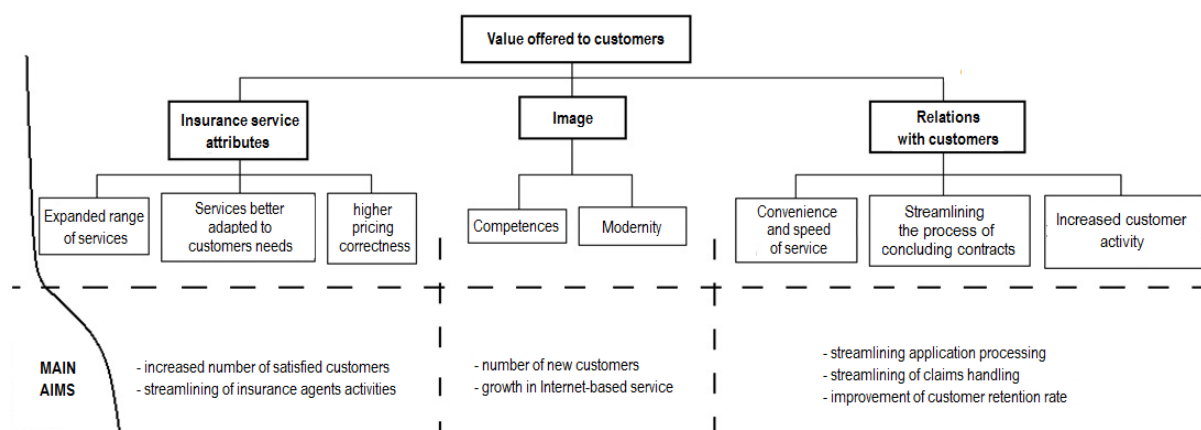
Source: own elaboration with the use of R. S. Kaplan, D. P. Norton researches [Kaplan, Norton, 2001, p. 80].

Taking into account the information presented in Figure 2, the issue that requires analysis from the insurance company is therefore not "if at all, but how to invest in e-business" [Read, Ross, Schulman, Bramante, 2004, p. 16].

Entering the area of Internet activity may have a different range, starting with the simplest of actions involving the launch of a website presenting general information about the company and ending with very complex high-tech solutions enabling the so-called self-insurance services provision.

With the introduction of customer service using the Internet, the primary objective is to create an effective system of communication with the customer. Strategic success factor in this regard is a skilful and drawing attention introduction of Internet users in company activities.

Considering the above, insurance companies that uses the Internet in their business activities, in order to provide customers with additional value related to product attributes, company's image and reputation as well as to customer relationships, needs to assign an important role of activities carried out in the following four perspectives [Klein, 2005, p. 62]:

- customer awareness (regarding the existence of web-based solutions),
- customer care for the customers who use the Internet solutions,
- customer bond with the implementation of the transactions on the Internet,
- customer satisfaction using the Internet .

The right approach of an insurance company to the issue of customer interest with online activities can be manifested in:

- increasing profitability of bond creation,
- obtaining detailed and up-to-date information about customers,
- greater tolerance for company's errors from customers,
- increased customer activity.

From the company's point of view the benefits of creating relationships with customers increase with time of maintaining such relationship as long-term customers tend to buy more, they are less likely to change a company whose services they use and require less expenditures for service. In addition, due to their positive campaign about the company, which is realized either by "word of mouth" or through online "forums", "chats" or other "social media" channels, they attract new customers. The whole impact of insurance sales via the Internet on insurance business is described in detail by M. Ratajczak [Ratajczak, 2000, p. 93-101].

Regular visitors can be immediately recognized by the inserted "cookies"[29] or by logging. The more the information about the customer will be examined, the better you can customize products to meet their individual requirements and the sooner the customer can feel connected with the company. It should also be noted that thanks to the Internet, the gained detailed and updated information support employees in the performance of their activities and facilitate the execution of these tasks.

Customers with good experience in dealing with the company are less likely to break that bond. Therefore, even if a certain distortion, resulting from imperfections and lapses on the side of the company appears, it may be tolerated by the client as an acceptable "margin of error".

4. Internet channel implementation strategies by insurance companies

Internet usage in the insurance business is dictated by the ability to offer in this way new added value, which can contribute to strengthening ties with existing clients and attract new

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[29] A cookie, also known as an HTTP cookie, web cookie, or browser cookie, is usually a small piece of data sent from a website and stored in a user's web browser while a user is browsing a website [Wikipedia, 2012].

ones. For this reason, the actions aimed at developing the use of the Internet and e-commerce are characterized by growing dynamic and by usage of increasingly complex market strategies.

Observation of the use of e-commerce by company from the commercial insurance sector lead to the conclusion that their business behavior can be judged primarily by:

-    the way of e-commerce engagement. According to this factor, one can divide insurance companies:

-        selling services only through electronic channels;

-        acting in traditional way and setting up separate organizational units that are providing services with electronic channels only;

-        doing business in both, traditional and electronic way, within one organization, with different grade of internal coordination of these activities;

-    the method of implementation of e-commerce value-added chain. This allows to divide companies to those which are:

-        concentrating only in selected segments of the value-added chain;

-        implementing e-commerce in the whole added-value chain.

Juxtaposition of the two, above mentioned, ways of measuring business activities of companies implementing e-commerce, allows to point out four basic e-commerce strategies. The figure 3 shows the four basic e-commerce strategies pursued by the companies on the insurance market.

Figure 3 Basic strategies of e-commerce engagement

Source: [Birkhofer, 2001, p. 118].

Adaptation strategy allows for, at least, a partial use of the e-commerce potential in, the longer conducted, traditional business. By enabling e-commerce solutions, the existing value chain is enriched with new tasks and activities. This option is designed to introduce e-commerce into the framework of previous activities in such a way, that on one hand to offer

additional innovative services and on the other hand provide a better use of its potential and improve economic performance.

Adaptation strategy is often seen by companies as a first stage of e-commerce implementation. According to this, first experiences are collected from the business use of the Internet, including its use as a distribution channel. This step generates a number of additional benefits, primarily fulfilling a support, which does not lead to any conflict with the existing channels. An important challenge is to create an attractive eye-catching customers form presented on the network. In a situation where an entity has a relationship with a well-known company, it's typical to introduce a common name referring to a recognized brand, and expanding the definition to indicate online activities (e.g. PZU Online[30]).

Also the multiplication strategy is based on an existing, traditional value chain of the company. Existing skills and business models are being used and subsequently moved to manage the newly introduced channel. This option is aimed at existing company's potential where within its business only smallest possible changes are being made. Companies using this strategy mainly use the Internet to coordinate its sales network and provide their customers with relevant information and services in the pre-and post-sale phase.

This strategy is suitable for companies that consider e-commerce as a new area of activity, which they want to manage with their own skills and competencies. It is a kind of expansion strategy. The main challenge here is to assign individual channels appropriate, different roles in order to mitigate potential conflict situations in the new multichannel system. A classic method for preventing the emergence of conflicts between different sale channels is dedicating new channels to the needs of specific, selected groups of clients and positioning them under a different name, as well as offering via those channels only selected, simple insurance services.

Integration strategy, as the third of the highlighted e-commerce entry strategies requires the full implementation of the value chain relevant for e-commerce and its strong coordination with existing activities realized in traditional way. Such actions on the one hand mean a broad introduction of new information and communication technologies both in terms of external and internal contacts, on the other hand is creating the potential for offering a wide range of modern services better complying with diverse requirements of customers.

Integrating the traditional and electronic channels, allowing customers to use the best suitable solution for them in different phases of the transaction process, should lead not only to raise the customer satisfaction level with the provided service system, but also to better exploit the potential involved in traditional and electronic channels owned by the company. Reaching such a state is also encouraged by the use of the Internet in internal relations between various employees of an insurance company, which improves not only the relationships, but also the tasks executed by employees.

However, deep integration of traditional and online channels can lead to conflicts within the company, in particular between the representatives of electronic channel and the representatives of traditional channels, who might perceive new channels as a threatening solution for their existence, especially in the longer term. For this reason, a consecutive integration of traditional and electronic channels and a gradually familiarization of employees with the inevitability of such integration is recommended.

Fourth of the mentioned strategies - the migration strategy - brings most profound changes to the previous activity. The aim of this strategy is to move the entire business to the area of e-commerce ("marketspace") and the provision of services in this area only.

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[30] As it was mentioned before PZU is the incumbent entity on the Polish insurance market and is a well recognized insurance company. Before the year 1990 it was the only player on the polish commercial insurance market. Recently (in 2012) this company created PZU Online which is selling a few types of insurances via direct channels.

In the case of a migration strategy, the company introducing electronic channel may assign the following functions:
-    to offer its own products allowing customers to conduct the entire transaction process (pre-sales, sales and after sales phase) solely via the Internet channel,
-    to present the products of different companies, or to provide a direct comparison of these products with the assumption that other phases of the transaction process will be realized in traditional way by the service providers,
-    to present the products of different companies, or to provide a direct comparison of these products, while providing opportunities to realize the remaining phases of the transaction process through the Internet channel (or traditional channel).

The last two cases are connected directly with taking the role of market intermediary connecting through electronic channels providers of the products with entities interested in purchasing those products.

Migration strategy involves the need for a broad and comprehensive use of modern information and communication technologies. This means, in case of implementation of such strategy, the need for the use of high-tech electronic technologies both in external relationships as well as within the internal operations carried out by a company. Additionally they should be used in a way allowing the maximum possible reduction of the labor work role.

Migration strategy entails major risks and challenges. The company must deal with the fact of market and competitive environment change in which new rules may apply, there are new, unknown competitors, and the previously cultivated corporate culture and business principles, employees skills and abilities are exposed to a new challenge. Therefore, it can be compared to the decision to create a totally new business profile. On the other hand, this type of strategy might bring significant opportunities.

Of course, each entry in the e-commerce sector, regardless of the specific strategies used, leads to changes in the functioning of the company. Nevertheless, for the market environment most perceived changes are within the distribution system. Specific changes in the system, however, simply result from the strategy of e-commerce implementation. The relationships between the basic strategies pursued by the company with the introduction of e-commerce, the objectives of these strategies and their corresponding innovative distribution systems are presented in table 1.

Presented information show, that companies implementing e-commerce in particular may aim at:
-    providing support for the existing value chain (option "support of the current activity"),
-    creation of a new value chain (option "new area of activity").

    Both of these options differ from each other with the way they are linked with the previous, traditional activities. While the strategies associated with support for the previous activities, these links are very large, the strategy associated with entering a new business area is characterized with small or even non-existing links.

However, there is also the possibility of simultaneous use of e-commerce – on one hand as a solution to support the previous activities, and on the other hand as a means of offering new products. In case of this option, the intensity of the relationship between the newly undertaken activities and the previously realized ones, will depend on the integration degree of the introduced Internet channel with traditional channels. Adoption of solutions assuming separate operation of these channels, will reduce this relationship mainly to the common use of databases containing information obtained through various channels (the traditional as well as the online), and support of these channels by the common back-office.

Table 1
E-commerce strategies and corresponding innovative distribution systems

Enterprise strategy	Adaptation	Multiplication	Integration	Migration
Type of innovative distribution systems	electronic access to basic information about the company (Front Ender)	Internet channel covering the entire customer service process operating independently of the traditional ones	Internet channel covering the entire customer service process integrated with traditional channels	Customer Service carried out solely via the Internet channel
Objectives	- securing core business, - image improvement, - increase the knowledge of the company among customers, - increasing of know-how	- general improvement in profitability - increase in sales and revenue, - brand rejuvenation, - better use of infrastructure	- improving overall profitability, increase in sales and revenue, - brand expansion, - risk and dependence reduction	- profitability through cost rationalization, - financial independence, - brand creation, - commercializatio n of information
Strategic options in the distribution	support for the traditional activities	support for the activities previously undertaken by the introduction of additional, dedicated Internet channel	creation of an integrated distribution system allowing a wider use of potential and benefits of traditional and digital channels	entry into new area of operations based on the exclusive use of the digital channel

Source: [Birkhofer, 2001, p. 124 and 219].

Much stronger links between traditional channels and online channels are present in the case of full integration of these channels, which gives customers, at every stage of the service process, a possibility to use, depending on individual preferences, from traditional or online solutions. It is obvious that such a solution is connected with the need to ensure strong links between e-commerce activities with the activities implemented in the traditional system at every stage of the service process and in all dealings carried out within these stages.

5. Use of Internet by insurance companies on the Polish market

Internet is being used more widely in the Polish insurance market since 2006. This year has become a formal standard by the insurance companies to have own website. But as a rule they were simple and unsophisticated sites. Only a few companies offered, with the use of electronic way, wider opportunities such as the calculation of premiums using a specially designed calculator, on-line requests for notification of injuries or the on-line purchase of

insurance. At the same time, companies selling policies online, offered through this channel only a few types of insurance. This information is presented in Table 2

Table 2
Companies offering on the Polish insurance market on-line shopping and types of insurances that can be purchased in this way (as of end of October 2006)

Non-life insurance				
Company	Travel insurance	House insurance	Car insurance	Other insurance
TU Allianz Polska S.A.	Yes	No	No	No
Benefia TU Majątkowych S.A.	Yes	Yes	No	No
TUiR CIGNA STU S.A.	No	No	No	Yes – personal liability insurance
STU Ergo Hestia S.A.	Yes	Yes	No	Yes – personal liability insurance and personal accident insurance
Generali TU S.A.	Yes	No	No	No
Link4 TU S.A.	No	No	Yes	No
MTU Moje Towarzystwo Ubezpieczeń S.A.	No	Yes	Yes	No
SIGNAL IDUNA Polska TU S.A	Yes	No	No	No
TUiR WARTA S.A.	Yes	Yes	Yes	Yes – protection for SMEs
Life insurance				
MACIF Życie TUW	-	-	-	Yes – life insurance and child start in adult life insurance
TUnŻ WARTA S.A.	-	-	-	Yes – life and endowment insurance, insurance with investment fond

Source: own work based on websites analysis of companies functioning in the polish commercial insurance market .

Information contained in table 2 show a quantitative advantage of non-life insurance companies offering full insurance transactions using the electronic channel over life insurance entities that offer this form of transaction. However, companies that sell property insurance, now mainly focus on the sale of three, specified in the table, kinds of insurance products: travel, housing and communication. Only three companies (TUiR Cigna STU SA, TUiR Warta SA and STU Ergo Hestia SA) offer via this channel also other types of insurance. A special remark deserves Warta SA, which back in 2006 was the only company, which prepared a website for business customers. However, it has to be mentioned, that the business offer consisted of only one packet of insurance[31]. It has to be mentioned also that the premium was calculated at 10% lower compared to the same package sold in the traditional way.

At the end of 2011 there were 30 (in 2006 - 32) companies providing life insurance and 33 (in 2006 - 35) companies providing non-life insurances, functioning in the Polish market [KNUiFE, 2006; KNF, 2011]. Standard for all above mentioned companies is having their own website mostly ending with "pl" or "com.pl".

This means a progress according to the situation on the Polish insurance market in 2003, which was analytically presented by M. Kaczała. Researches of this Author show that in 2003 about 13% of insurance companies functioning in Poland didn't have own websites [Kaczała, 2006, p. 232; Kaczała, 2004, p. 176-177].

Among these websites one can find very simple sites, which presents only the most important information as well as much more sophisticated ones[32].

The more sophisticated ones, beside having many information about the company itself, its affiliates, partners and products, also offer much wider possibilities than just the search of information (e.g. premium calculation, using a specially designed calculators, on-line insurance purchase, filling out on-line applications such as the notification of injury, , sending requests for on-line services or the possibility of direct consultations with agents or other advisers through the internet channel).

These types of opportunities, however, offer only some of the companies operating on the Polish insurance market. Most companies have only a simple and uncomplicated sites which main task is to provide brief information about the company and its products.

Additionally, most of the companies, which offer the opportunity to purchase insurance through the internet are offering only a few types of on-line insurances. The most popular include travel, house and car insurance.

Table 3 shows companies on the Polish insurance market, which already in 2006 offered the opportunity to purchase insurance through the on-line channel and the situation regarding that issue at the end of October 2011.

The information contained in Table 3 indicate the dominance of companies offering the possibility to carry out a full non-life insurance transactions using the electronic channel over the companies that offer this form of transaction regarding life insurance[33]. However, companies involved in selling non-life insurance, nowadays, mainly focused on the sales of the three listed in the table kinds of insurances: travel, house and car. Only four companies (Benefia TU Majątkowych S.A., STU Ergo Hestia S.A., Generali TU S.A., SIGNAL IDUNA Polska TU S.A.) offer with the use of on-line channel other types of insurance.

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[31] This applies to the Warta "SMEs" package - which is a comprehensive insurance protection for small and medium-sized enterprises.

[32] Generally one can say that these websites are already fully formed, which of course doesn't mean that they are always up to date and that they won't be in the future developed and enriched with additional elements.

[33] There would be an even greater disparity in this respect if the table would include some companies, that started its businesses after the year 2006, which nowadays offer the possibility to purchase on-line insurance – e.g. Liberty Direct or AXA direct.

Most companies sell insurances with the use of their own, main website (e.g. MTU, Generali, Hestia, Link4). However, others have a separate unit specifically dealing with on-line insurances (for example Benefia has a separate internet page www.benefia24.pl intended only to serve customers on-line).

Table 3
Companies offering on the Polish insurance market on-line shopping and types of insurances that can be purchased in this way (as of end of October 2006 and the end of October 2011)

Non-life insurances								
	Travel insurances		Property/house insurances		Car insurances		Other types of insurances	
	X/2006	X/2011	X/2006	X/2011	X/2006	X/2011	X/2006	X/2011
TU Allianz Polska S.A.	Yes	Yes	No	Yes	No	Yes	No	No
Benefia TU Majątkowych S.A.	Yes	Yes	Yes	Yes	No	Yes	No	Yes – life insurance
Interrisk S.A. (earlier TUiR CIGNA STU S.A.)	No	No	No	No	No	No	Yes – mainly third party liability insurance	No
STU Ergo Hestia S.A.	Yes	Yes	Yes	Yes	No	No	Yes – general liability insurance	Yes – general liability insurance
Generali TU S.A.	Yes	Yes	No	Yes	No	Yes	No	Yes – accident insurance
Link4 TU S.A.	No	No	No	No	Yes	Yes	No	No – only life insurance premium calculator
MTU Moje Towarzystwo Ubezpieczeń S.A.	No	No	Yes	Yes	Yes	Yes	No	No – only on-line claims
PZU S.A.	No	No	No	No	No	Yes	No	No – only on-line claims
SIGNAL IDUNA Polska TU S.A	Yes	Yes	No	No	No	No	No	Yes – ski and water sports accident insurances

TUiR WARTA S.A.	Yes	No	Yes	No	Yes	No	Yes – SME's protection	No
Life insurances								
	X/2006				X/2011			
MACIF Życie TUW	Yes – life insurance and birth insurance				Yes – individual time limited life insurance - Acti OCHRONA, individual unlimited life insurance Acti PLUS, individual time limited life and endowment insurance Acti GWARANT			
TUnŻ WARTA S.A.	Yes – time limited life and endowment insurance linked to insurance capital funds				No – only the possibility to see the data of contracts concluded on-line			

Source: Own researches based on the analysis of websites of insurance companies functioning on the Polish insurance market.

Particularly noteworthy are the company STU Ergo Hestia and Signal Iduna, which offer relatively widest portfolio of on-line insurance products. Moreover, Hestia posted on its home page a questionnaire for users, which helps them, after answering a few simple questions, to find out what insurance protection they most likely need and what insurance cover the company can offer them. In addition, Hestia created:

- a simple on-line shop called "sklep internetowy"[34] where potential customers can purchase some insurances offered through the Internet;

- an electronic after-sale service called "eKONTO", where customers can, to some extent, manage their policies.

Most companies in the Polish insurance market are expanding their on-line sale offer, but there are also such companies like InterRisk SA or Warta, which have abandoned insurance sale through electronic channels. It is difficult to indicate the reason for such behavior, especially in the Warta case. However, it should be noted, that the company has kept the on-line instruments to manage policies for customers who previously purchased insurances electronically.

Regarding the life insurance sector, among the companies that offered the possibility to purchase insurance on-line in 2006, currently, such possibility offers only one company, namely Macif TUW Life. However this company is continually expanding its range of electronic sale. Moreover one other company - Link4 - offers the possibility to calculate premiums for offered life insurances but without the possibility to purchase those insurances on-line through on-line[35].

It should be noted, however, that very often the life insurances are characterized by a relatively higher complexity than many so-called "simple" property insurances (e.g. travel insurances). This may partly explain the relatively smaller interest in using e-commerce by the companies functioning on the life insurance market in Poland.

6. Customers and insurers benefits associated with the use of Internet

Today's markets offer customers a wide range of services and considerable choice. Under these conditions, according to Lake and Hickley the customer decision-making consists of

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[34] A link to the on-line store can be found on the main webpage of the company but it is poorly exposed.

[35] In order to purchase the insurance protection, the customers have to order an appointment with an company's employee.

four basic steps: collection of information, evaluation of alternatives, purchase decision and behavior after the purchase [Lake, Hickley, 2005; p. 21].

Today, the number of opportunities open to customers is surpassed only by the amount of available information on each of them. Power, for a long time, has been passed from the hands of the suppliers into the hands of the customers. As a result of a highly competitive market and the abundance of information the clients appeared in the business center of the universe saving [Slywotzky, Morrison, Andelman, 2000, p. 32].

Client with a strong market position, trying to meet his specific need, is looking for a solution that would offer the highest value. Perceived by customers value is generally shaped by two main issues: the total value delivered to the customer and the customer's total cost associated with a given offer. This is depicted in Figure 4.

Figure 4 Value delivered to the customer
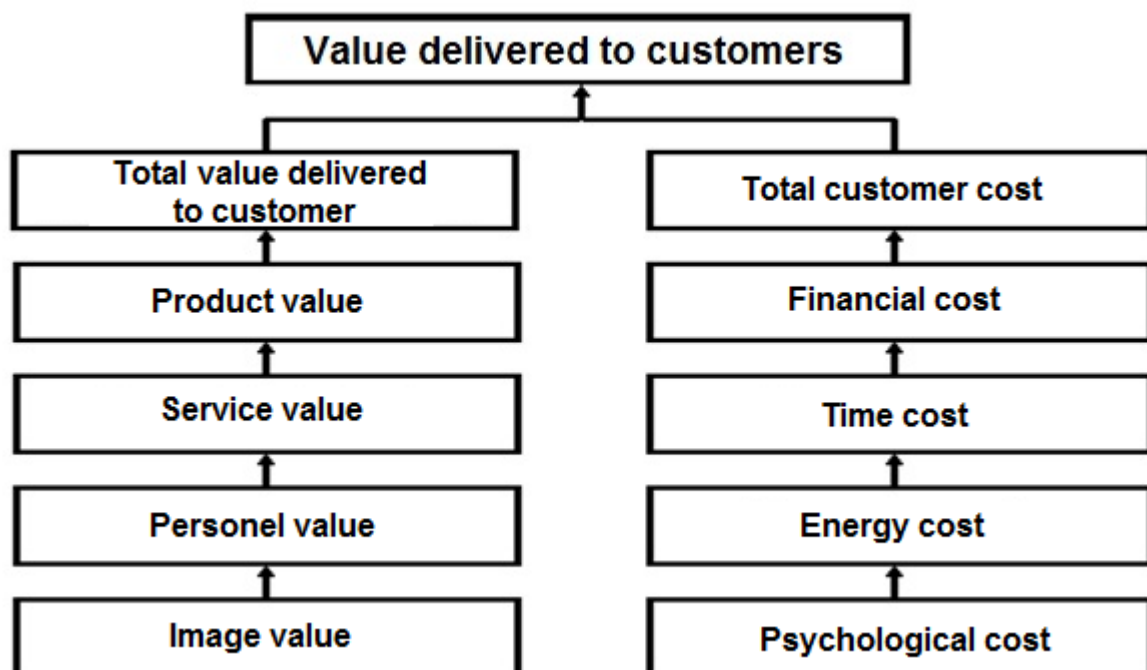
Source: [Kotler, 2005, p. 60; Kotler, Armstrong, Saunders, Wong, 2002, p. 520].

Customers having the opportunity to choose their supplier and interested in maximizing the value delivered to them can pay attention to:
-     increase the benefits associated with the attributes of the product, service system, and the image as well as with the reputation,
-     reduce the non-financial customer costs (cost of time, energy, mental costs),
-     reduce financial costs of purchase.

E. Skrzypek stated, that „In conditions of growing competition, companies are looking for ways that lead to improved management of all areas of the company and enable process management improvement" [Skrzypek, 1999, p. 11]. This statement still applies nowadays, because in today's commercial insurance market, companies interested in maintaining and strengthening their market position, have to offer not only a good product, but also need to possess efficient solutions serving the offering and provision. The improvement of these solutions, an important role play modern information and communication technologies. In

chronological order, such modern technologies, were in the first instance used in the field of back-office facilities. These technologies are initially used to automate some of the work carried out at the back-office (e.g. the design of new products), which allowed the reduction of the value chain, and then, after the dissemination of personal computers began to be widely used to improve the office work [Haes, 2003; p. 87].

The modern trend is reflected in the use of modern information and communication technologies to automate transactional processes taking place between the sellers and their consumer, which requires network connections between them. Among the networks used for these purposes, Internet role is growing, which the companies, including those operating on the insurance market, can be used in a variety of fields, including:

- providing customers with information about the company and its products,
- exchange of information between the company and customers,
- conducting the whole transactional process, including the stage of purchase and payment.
Usage of Internet by companies functioning on the insurance market and the introduction of solutions specific to the e-business results not only from such reasons as:
- aiming to rationalize the cost of the company,
- streamlining of internal processes,
but also from:
- ability to offer added value to customers and
- customers' growing interest in the use of modern channels in contacts with the company.

For this reason, the use of electronic communication channels leads to improving the company's image in the eyes of customers and strengthen its market position against the competition. In this situation the use of the Internet and the introduction of solutions specific for e-business by some commercial insurance companies should not be left without a response from the other companies in this market.

7. Conclusions

Today, knowledge of the Internet can be considered as a relatively common and this medium is already often used by insurance companies in pre-sale phase. Under these conditions commercial insurance providers interested in developing e-business have generally already figured out the so called Internet-stage recognition and interest in this medium. In this situation, companies providing commercial insurance services should consider the concept of progressive development of e-business activity assuming:

- progressive integration of online channel with the existing traditional channels in order to ensure the ability to offer added value not only due to the functioning in electronic segment, but also due to the coupling of this segment with the traditional activity,
- deepening this integration in a stepwise manner, on the occasion of the entry of e-business solutions in subsequent, more crucial areas of insurance activities.

The first premise of this concept indicates the need to integrate online channel with existing traditional channels, allowing to effectively and efficiently carry out sales activities [Zolners, Sinha, Lorimer, 2005, p. 63], because on the one hand it allows customers a variety of ways to contact the company and carry out his issues with the channel, which is considered as the most favorable . On the other hand, this solution creates opportunities for active search for customers and gain better information about them, and thanks to their accumulation in a common database, helps develop a proper customer segmentation as well as create product and pricing policy fitting well into customer's expectations.

Fullest capabilities in this regard occur in case of e-business use in all major areas of the company. Achieving this allows the company to:

-      provide with rich added-value customers using electronic channels, as well as customers using traditional channels as a result of shortening of carried out processes through the introduction of information technology solutions serving, to a large extent, for all of the structures,

-      achieve better operating processes, by providing employees with faster access to data and the ability to raise them in various layers,

-      differentiate from the competition, and in this way to build the brand and subsequently attract customers.

The second assumption recommends a gradually integration of online and traditional channels, carried out with the introduction of the commercial insurance service providers e-business solutions in other areas of activity, which are characterized by:

-      key role for the company's market position,

-      sensitivity to the use of e-business.

Not only observation of the insurance markets of developed countries, but also the Polish market shows that the role of the Internet in the provision of insurance services is growing.

On the other hand, despite positive changes, the use of Internet by insurers in the Polish market is less intense than in highly developed markets. This is primarily due to the relative weaker development of broadband Internet and worse access of Poles to this network. This is shown in Figures 5 and 6.

Figure 5
Number of broadband lines (per 100 inhabitants) in selected countries
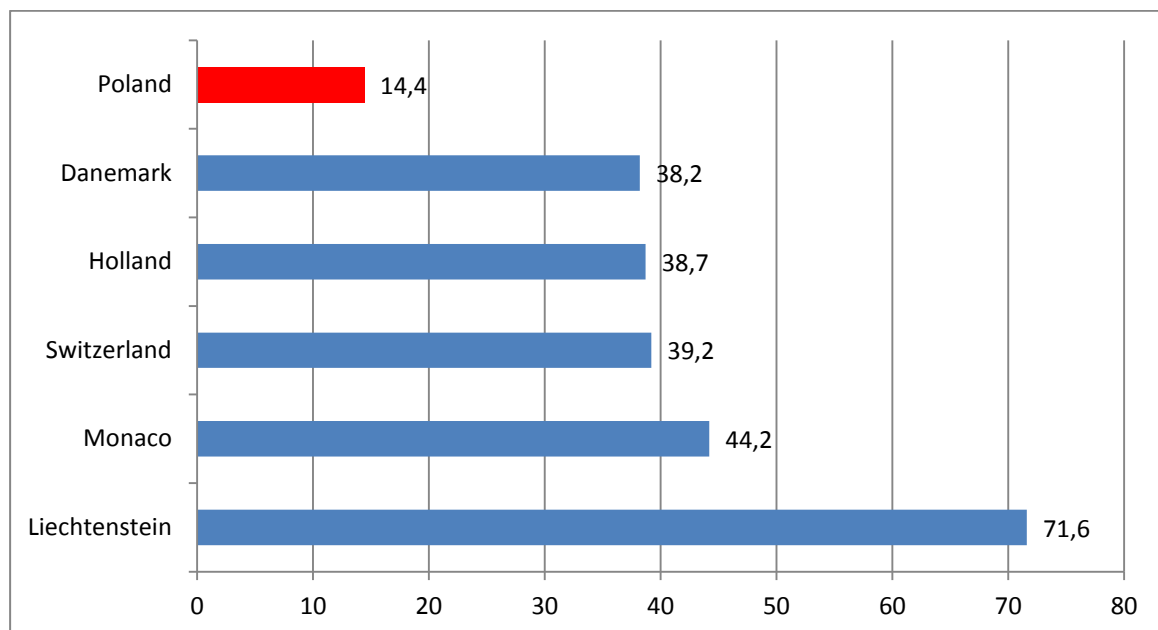
Source: [UNESCO, ITU, 2012].

Figure 6
Mobile Internet (number of active cards per 100 inhabitants) in selected countries
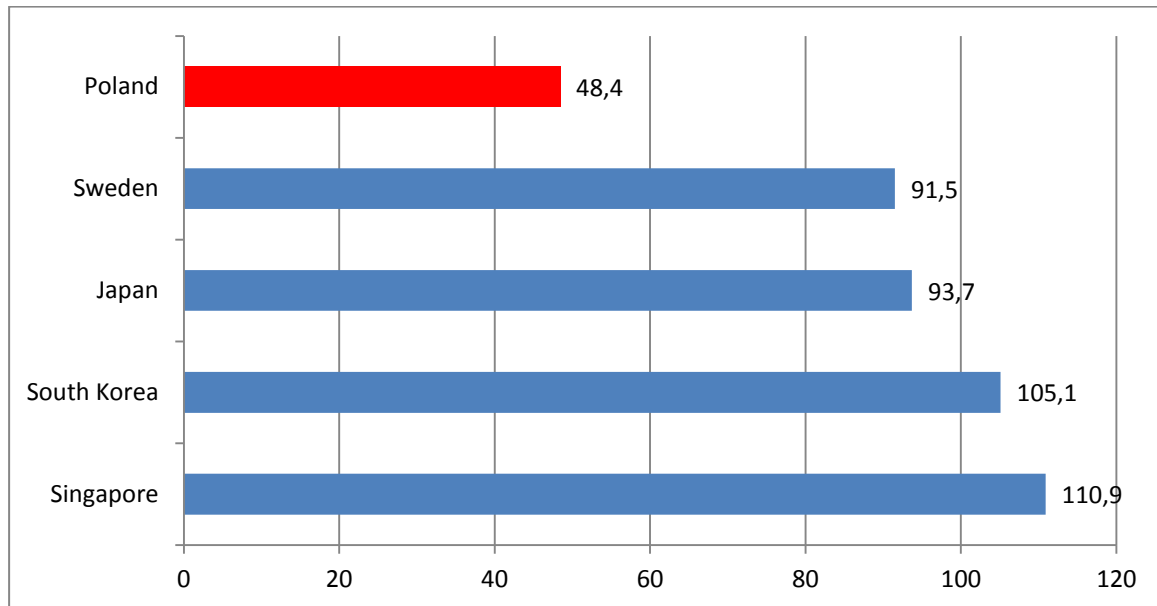
Source: [UNESCO, ITU, 2012].

However, according to Ted Kelly, the president of Liberty Mutual[36], in 2013-2014 in Poland, 10-20% of the total communication insurances will be sold directly (i.e. via telephone and the Internet) [Wall Street Journal Polska, 2007]. Taking into account that in Poland at the end of 2006, the value of insurance policies sold to drivers totaled at nearly 10 billion zł, and assuming only a stability of the value of sold insurances - according to this forecast - companies offering these insurance by phone and Internet will soon acquire from this market around 2 billion zł.

The value of the direct market in Poland is likely to exceed at the end of 2011, 1 billion zł. Presented by the Polish Insurance Association (Polska Izba Ubezpieczeń) for the first time data on sales by telephone and the Internet shows that after the first half of 2011 the collected premium in the direct insurance market increased to over 500 million zł [PIU, 2011]. According to Liberty Direct the total value of the direct insurance market in Poland tripled since 2007 [Rzeczpospolita, 2011]. The value of the Polish direct insurance market in recent years is illustrated in Figure 7.

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[36] Liberty Mutual is one of the most important direct insurers in Poland.

Figure 7
Value of the direct insurance market in Poland in 2007-2011 (in mln of zł)
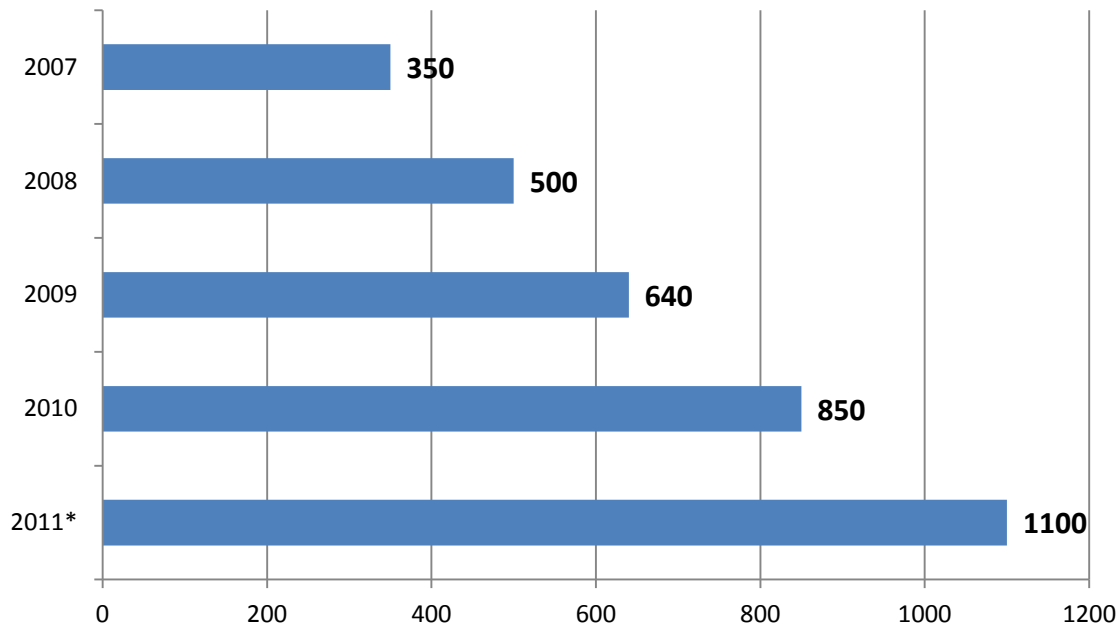
* Liberty direct forecast
Source: Various companies [Rzeczpospolita, 2011].

In direct system Poles primarily buy communication insurances. More than 57 percent provide mandatory liability insurances of vehicle owners. Facultative communication insurances turn more than 24 percent. Other types of insurance that are also sold over the phone and via Internet, are related with:
- accident and sickness insurances (9.9 percent),
- personal assistance (5.5 percent),
- other non-life insurance (e.g. houses) (2.29 percent) [PIU, 2011].

Overall, in the first half of 2011, almost 2.9 million insurance contracts over Internet and phone were concluded. The value of direct sales in Poland by Polish and foreign insurance companies accounted for about 3.3 percent of the total value of non-life insurance sales realized in Poland at the end of 2010. In communication insurances, this share was the relatively biggest and reached over 5 percent [PIU, 2011].

Projected changes in direct communication insurance sales will strongly influence the use of the Internet in the area of the whole insurance market.

At first, an increasing role of the Internet role in the internal structure of direct sales might be predicted. Currently, most direct insurance policies are sold by phone and the Internet sales is relatively small. It should be expected that soon the roles will be reversed and on-line sale will dominate.

Secondly, the Polish direct insurance market consists of more and more new companies, including virtually the same strong brands, such as: Axa, Allianz, Liberty, and other like: CU and PZU entered this market within the last 2 years.[37] These companies certainly have to cope in an increasingly competitive market. It means a clear transformation of the economic structure of the national insurance market, which only a few years ago was dominated by one company – namely Link 4 – holding approximately 90% of the market.

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[37] It should be recognized that some of these companies built their position solely on the basis of direct channels (e.g., Link 4, Axa, Liberty), and other treat the direct channels as a complement to the previously used traditional channels (e.g. Commercial Union, PZU).

Thirdly, a widening of the range of insurance services offered in direct system should be assumed. This expansion will primarily relate to other, simple insurance services, such as travel insurance. However, one should anticipate also the use of direct channels, including the Internet, in life insurance, whose role in Poland is growing rapidly. Such direction is indicated directly by actions of some insurers. For example, Link 4 applied for a permit[38] for provision of life insurance in direct system. Moreover Benefia also announced to apply for such permit in September 2007 [Gazeta Wyborcza, 2007] and after getting it, this company started to sell life insurances on-line [Gazeta Prawna, 2008].

Fourth, the growing role of the Internet in Poland in providing commercial insurance is also indicated indirectly by undertaken detailed market research in order to know the opinion of national customers on this topic. Such a study conducted in 2007 by KPMG gave the following results [KPMG, 2007]:

- 12% of customers will definitely buy the insurance policies on the Internet,
- 46% of customers stated that rather yes,[39]
- 7% of customers stated that certainly not,
- 21% say that it is rather unlikely,
- 14% of customers do not have an opinion on this subject.[40]

It is almost certain that in the near future, e-commerce will be widely used in the area of commercial insurance services. It is therefore important to enter into the modern business segment and taking pre-emptive restructuring of internal processes and structures complying with the requirements of e-business. One should also remember that the full use of the potential of e-business and achieving of added-value offered by this type of activity also requires convincing the potential users. This means, first of all, a comprehensive approach to e-business activities, which should create the so-called "win-win" situation for both sides - the company and the customers.

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[38] Every company, that wants to function on the Polish insurance market, has to apply for a permit from the Polish Financial Supervision Authority.

[39] At the same time Internet users interested in buying a policy online states that: a/ it is not enough for them to solely carry out on-line application on the website b/ insurers websites should provide information about the premium price, advices and insurance examples, c/ they should be able to track via Internet the status of the application.

[40] Additionally from other, conducted by KPMG surveys, 41% of customers considers Internet as the best service channel.

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Aniela Raluca Danciu

The FDI Profile in the Romanian Manufacturing Sector at the Regional Level

Abstract:
The topic of the importance of FDI on receiving countries was largely addressed in the economic literature, the determinants of FDI getting a substantial share of it. Although the researchers are far from reaching consensus, the theoretical and empirical analysis revealed an extensive range of likely determinants of FDI, including exogenous macroeconomic factors such as exchange rates (or expectations about future exchange rate movements), taxes and tariffs, market size, country risk, trade protection and trade flows, the quality of institutions that influence the well-functioning of markets (corruption included), knowledge-capital factors such as skilled labor, research and development factors.

Yasemin Derelioglu

Perfectionism, Emotional Intelligence and Hope in Adolescence

Abstract:

The primary purpose of the current study was to examine the relationships between perfectionism, emotional intelligence and hope in adolescence. For this purpose, the Children´s Hope Scale, developed by Snyder et al.´s (1997) and adapted into Turkish by Atik and Kemer (2009), Positive-Negative Perfectionism Scale developed by Kırdök (2004) and Bar-On Emotional Quotient Inventory Youth Version E-i: YV, developed by Bar-On and Parker (2000) and adapted by Köksal (2007) were used to gather data in a sample of 190 middle school students attending 6th , 7th and 8th grades. Multiple regression analyses revealed that perfectionism and emotional intelligence are predictors of hope for the adolescents. And it is found that there are significant relationships between adaptive perfectionism, hope and emotional intelligence scores, while maladaptive perfectionism is in significant relationship with only stress subscale of emotional intelligence. Hope, perfectionism and emotional intelligence were also analyzed and discussed regarding gender, school achievement and income of the adolescents.

Keywords: perfectionism, emotional intelligence, hope, adolescence

Anna Drab-Kurowska

E-commerce in Modern Economy

Abstract

The Internet is the driving force behind today's economy, creating opportunities and chances for business development worldwide. Internet technologies are developing very intensively, and the quality of the telecommunications infrastructure is improving systematically, new media providing access to the Internet are being offered. This result is a growing number of Internet users. Structures and business profiles transform under the influence of technology and the e-commerce sector is developing intensively. It seems that the serious barriers that used to restrict the development of e-commerce a few years ago, have now disappeared. In turn, the opportunities that have emerged on the market provide a very good environment for the development. Social Media Marketing is a field of Internet marketing involving indirect promotion through communication with potential customers through social networking sites or blogs, by posting or sharing articles, videos and images. Social media is a communication channel to allow interaction between Internet users, using technologies such as blogs, forums, discussion groups, wikis, podcasts, emails, instant messaging, VoIP, sharing music, videos and photos. The Internet is a channel for companies to reach millions of potential consumers. Many organizations want to reach them using the opportunities offered by social media. Especially so, because they allow for an open debate on specific products or services, and the large number of consumer feedback expressed on the web is a chance for companies to benefit from collective intelligence. The main problem with social media marketing from a business perspective is that it can be incredibly time-consuming. Social media marketing campaigns are not one-shot affairs; they need to be nurtured over time. While big businesses have been using social media marketing effectively, resources that a lot of small businesses don't have. Social media marketing is a type of marketing that many small businesses could benefit from, if only to find out more about what their customers are thinking - and saying - about their brand and their products.

The essence of modern technology

The development of computers and information systems has had an unquestionable impact on the functioning of organizations and of the economy as a whole. The booming development of the Internet and the spectacular success of companies that quickly became market leaders resulted in increased interest in the strategic importance of information technology.[41]

It should be emphasized that the scope of applications of information technology has expanded significantly in relation to previous years, as shown in the following table.

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[41] A. Budziewicz-Guźlecka, Information management in public administration, Scientific Journal No. 574, Service management vol. 5, Szczecin 2010, s.171.

Table 1. The main uses of information technology.

The 1980s	The 1990s	2000 and beyond
☐ development of transaction processing systems (TPS) and management information systems (MIS) ☐ transaction management ☐ automation of routine tasks	☐ further development of TPS and MIS systems ☐ data management ☐ user-friendly processing ☐ training systems ☐ multi-module systems ☐ enterprise architecture ☐ decision support systems (DSS) ☐ expert systems (ES) ☐ MRP and MRP II planning systems	☐ external relationship management (CRM, SCM) ☐ knowledge management ☐ change management ☐ environmental monitoring ☐ network management ☐ e-commerce and online commerce ☐ business Integration ☐ advanced decision support systems and business analysis ☐ value network management, development of network structures and global structures ☐ risk management

Source: *Strategies and models of electronic commerce.* Editors: C. Olszak , E. Ziemba, PWN, Warsaw, 2007, p. 32.

With current IT technologies, it is possible to:

☐ create new ways to design organizations and new organizational structures, especially network structures;

☐ create new relations between a company and its customers and suppliers, who communicate with each other with the help of computer networks;

☐ facilitate development of electronic commerce, which reduces the cost and time of delivery and facilitates contacts between suppliers and customers;

☐ improve efficiency in production and services;

☐ effect changes in the competition and the structure of the industry;

☐ provide mechanisms for the coordination of work and creation of knowledge for intelligent organizations;

☐ contribute to the development of productive knowledge workers;

☐ enable free communication between managers via computer networks;

☐ gain opportunities to coexist and share in the global economy.

It is also worth pointing out the multidimensionality of information technology, which is presented in the following matrix.

Table 2. Dimensions of information technology.

IT as a tool for developing the company's strategy	IT as a tool for gaining competitive advantage
☐ supports the business strategy ☐ drives the development of business strategy ☐ virtualization medium	☐ creation of virtual value ☐ device for customer relations ☐ customization of products and services ☐ creation of new organizational roles and

	market structures
	☐ device for intellectual resources
IT as a tool for transformation	**IT as a tool for shaping the work environment and the organization of IS**
☐ redesigning processes ☐ improving coordination ☐ improving cooperation ☐ use of information ☐ improving learning	☐ new IS opportunities ☐ organization of processes in IS ☐ IS architecture ☐ IS flexibility ☐ ergonomic and intuitive interface

Source: *Strategies and models of electronic commerce.* Editors: C. Olszak, E. Ziemba, Oxford University Press, p. 33.

The impact of information technology on the economy and society is undeniable, and this is due to IT's distinctive features:

  ☐ connectivity,
  ☐ convergence,
  ☐ ubiquity,
  ☐ development of appropriate software.

The Internet affects all areas of the economy. It changes the financial markets (on-line banking), contributes to the emergence of new forms of business (virtual organizations), and forces traditional media to redefine their business. Wholesale and retail trade must compete with on-line rivals. The Internet, on the one hand, increases the level of competition, by globalizing it, affects the attitudes of consumers, to whom it gives access to vast amounts of information so they can easily compare the goods or services offered. On the other hand, it provides organizations with new and previously unknown opportunities for expansion, methods of operation and competition, provides access to new distribution channels, gives easy access to the market, makes it possible to gain a competitive advantage. The rapid development of the Internet has led to the emergence of new sectors of the economy, either directly or indirectly related to the functioning of the network (e.g., Internet service providers, e-commerce).

As a result of the development of the Internet, the conditions of competition on the market are changing, which is the result of:

  ☐ a change in the presentation of products – on the Internet, they are presented not physically, but using pictures, audio, text;
  ☐ disappearance of all boundaries – the traditional borders between countries, economic sectors and between enterprises and buyers are getting blurred. Buyers have a greater influence on the development of new products;
  ☐ an increase in the competitive power of consumers – they can quickly, by clicking the computer mouse, move to another manufacturer.

The essence of e-business
The advancement of computer network technology has caused a rapid development of e-economy, the components of which are e-business and e-commerce. Electronic business is a rather complicated, unclear term, causing a lot of confusion and contradiction. In the literature, it is interpreted in different ways.
A general approach to e-business is presented by A. Fisher, to whom the central idea is that of reconstructing the entire enterprise in the context of the best possible use of modern

information and communication technologies.[42] This topic is presented in a different way by A. Szewczyk in the book "Fundamentals of e-business", which puts emphasis on the role of the Internet in the shaping of e-business. E-business is the use of modern software, hardware, and communication technologies to conduct business on a global scale. An incredible role here is played by the Internet, which is a global network of computers.[43]

W. Cellary, in turn, highlights exchange, treating e-business as a generalization of e-commerce. He concludes that it is hard not to see that electronic means may be used not only in the business processes related to trade, but also in many others. The core of e-business is defined by the drive to:

- Replace paper documents with electronic documents, and organize electronic workflow,
- Replace human interaction through direct contacts during face-to-face meetings with interactions through electronic media.[44]

A more detailed approach to e-business is presented by R. Wigand and A. Picot. The authors draw attention to the aspect of electronic exchanges. According to them, e-business is any form of resource sharing among participants of an undertaking, carried out through electronic links and exchange of information using electronic media, while the exchange is regulated by special arrangements agreed within each organization and between the organizations, as well as by general agreements adopted on a national or international basis. E-business is conducting business online with the use of information systems, that is, Internet-based technologies. According to these authors, e-business consists of such elements as:

- □ e-commerce,
- □ business intelligence
- □ technological capabilities to self-service most of the organization business processes.

It should be stressed that the application of e-business requires, in practice, such components as: commitment, trade and analysis. The concept of commitment refers to the need for the creation of cost-effective commercial websites and applications, targeted at marketing, web advertising, and specialized promotional tools. Trading online means doing business with measurable and secure processing of orders. Analysis consists in understanding attitudes of the customers and purchasing motives and using this knowledge to improve the quality of the services provided.[45]

A. Hartman, J. and J. Kador Sifonis provide the following definition of e-commerce: "E-commerce is a special type of undertaking in the field of e-business, focused around single transactions using the network as a medium of exchange, encompassing the relationships between businesses (B2B) as well as between the company and the consumer (B2C)". [46]

According to the definition proposed by the World Trade Organization (WTO), e-commerce means the production, advertising, selling and distribution of products via telecommunication networks.

B. Gregor and M. Stawiszyński propose the following interpretation of the concept of e-commerce. According to these authors, "... e-commerce is the process of selling and buying products and services, that is concluding business transactions using electronic means, via the Internet ..."[47]

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[42] B. Gregor, M. Stawiszyński, *e-Commerce*, Oficyna Wydawnicza Branta, Bydgoszcz-Łódź 2002, p. 78

[43] A. Szewczyk, *Fundamentals of e-business*, Wydawnictwo Naukowe Uniwersytetu Szczecińskiego, Szczecin 2006, p. 34

[44] D. Nojszewski, *Electronic business – what business?*, E-mentor, no 1/2004, p.31.

[45] B. Gregor, M. Stawiszyński, op. cit., p. 78.

[46] A. Hartman, J. Sifonis, J. Kador, op. cit. , p. 19.

[47] B. Gregor, M. Stawiszynski: *E-commerce*, op. cit., p. 77.

Describing e-business models, we cannot forget about the most important types of business entities, such as companies and organizations, individual customers (consumers) and the state government.

We also cannot forget about the economic environment in which businesses operate. To describe e-business models, there are three main actors of e-economy, specifically: the business (enterprises), the consumers and the government. The relationships that exist between these entities (groups) on the market are shown in Table 3. They are the most important elements of the economic environment in which any enterprise operates on the web.

Table 3. Relationships between the main actors of the electronic market.

	Government (G)	Business (B)	Consumer (C)
Government (G)	(G2G) coordination of processes, internal workflow	(G2B) flow of economic information	(G2C) administrative information flow
Business (B)	(B2G) public procurement	(B2B) "classic" e-business	(B2C) "classic" e-commerce
Consumer (C)	(C2G) taxes	(C2B) comparing prices	(C2C) Internet auctions

Source: Own work based on: C. Combe, Introduction to e-business, management and strategy, Amsterdam - Boston - Heidelberg - London - New York - Oxford - Paris, 2006, p.67

There are two basic models of B2B e-commerce:
- the first type is focused on the market and is the result of the use of EDI in large enterprises, the use of the Internet has increased the availability of markets previously closed and has reduced costs of communication between firms;
- the second type is focused on the supply chain and includes the following services:
- E-procurement (receiving and processing orders over the Internet),
- E-fulfillment (electronic order fulfillment),
- E-payment (electronic payment).[48]

From the point of view of the considerations in the area of e-business, the B2C sector deserves particular attention. Specific areas of application of B2C are shown in Figure 1.

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[48] T. Ordysiński, *Modelling* …, op. cit., p. 25
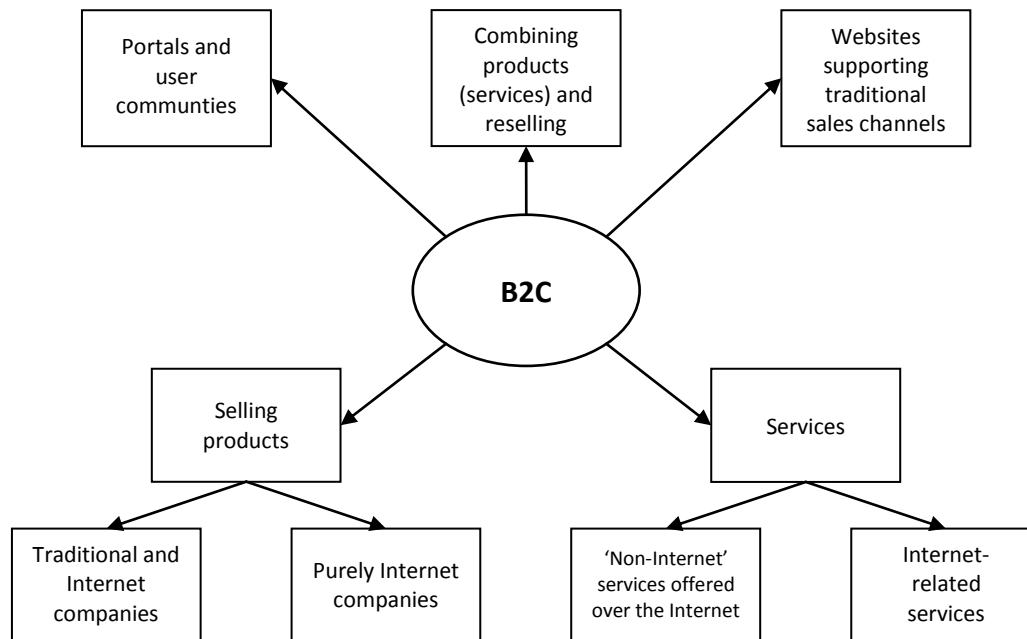
Figure 1. Areas of application of the B2C model.
Source: B. Gregor, M. Stawiszynski: E-commerce, op. cit., pps. 70-80.

From the point of view of e-business, C2C transactions include all kinds of business (and not only) interactions between consumers using electronic means of communication.C2C transactions take place in virtual trading markets - auction houses or advertising portals. Some advocate the viewpoint that Internet auctions are e-business in the C2C category. Apart from the auctions as such, there are also advertising portals and their surrounding communities among the interaction tools in this branch of e-business.

The second pillar of C2C commerce consists of the rapidly expanding portals that enable users to create and view ads. Such portals in their presentation layer may be similar to auction websites, but they do not allow transactions to be concluded - these are completed outside the system. Advertising portals do not carry any information about the agreements concluded between users. They are so developed as to make it possible not only to describe the items, but also to add pictures and contact details of the seller. Nothing restricts users from including pricing conditions or delivery details in the descriptions of the goods. C2C commerce gave online purchasing a new, wider perspective. A great advantage of this type of trade is a significant reduction in transaction costs – this advantage was spotted by small and medium-sized enterprises, which are increasingly using electronic auctions as a channel for the sale of goods.

The use of e-business systems in organizations impacts on lowering costs and saving time, provides a convenient form of communication inside and outside the organization and reduces or eliminates the flow of paper documents. E-business systems may be open or closed, depending on the strategy and implementation objectives. Open system means that the desired information can be available to all users, and a closed system – i.e. extranet, is one in which information may be available only to a select group of users having a mandate in the form of password.[49]

Many e-business solutions are based on database applications, streamlining information management systems in organizations. Selection of the areas and activities where the use of e-

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[49] H. Sroka, *Strategies and methodology of building e-business systems*, Wydawnictwo Akademii Ekonomicznej, Katowice, 2005. p. 193.

business can bring potential benefits should be a sensible and independent decision of any organization. E-business systems are usually found in these areas:

- ☐ Finance and banking (banks, insurance, and financial institutions).
- ☐ Communications and telecommunications.
- ☐ Customer relationship management.
- ☐ Distribution and logistics.[50]

Analysis of the e-commerce market in Poland

According to reports, analyses and forecasts of various companies and institutions, the Polish e-commerce market is considered one of the fastest growing markets in Europe. Both theorists and practitioners agree that the potential of e-commerce in Poland has not yet been fully discovered and exploited, and the best times are yet to come. Already, 70 per cent of Internet users declare that they shop on-line, spending more and more each year.

Recent studies from multiple independent sources, point out the very dynamic growth of e-commerce in Poland. eCommerce Index – a study conducted by CubeRoot among several hundred online stores showed that in 2011 the Polish e-commerce market grew by over 32% and amounted to almost 18 billion PLN.[51] Similar numbers were quoted in a study conducted by Forrester Research "Centre for Retail Research", in which Poland took the first place in Europe in terms of the growth rate of the e-commerce market. In 2010 alone, the increase was 33.5%, while in 2011 the growth reached 24%.It should be underlined that the market is continuously expanding, and new analyses and opinions of the vendors themselves show that the profitability of doing business on the web is much higher than in the traditional model. A study of the UK-based company Kelkoo confirms the predictions of Forrester and a 24% growth in the e-commerce market. It also indicates that Polish e-commerce is the fastest growing market of its kind in Europe, and in 2012, Poles will spend 5.6 billion EUR on online shopping.

It also indicates that the main factor responsible for such a large growth rate is the fact that for many years, as a country, we were outside the main stream, in which the model of trading via the Internet was shaped[52]. This also results from the availability and quality of Internet access, which in Poland has only recently risen to a European level. It should also be noted that Polish e-businesses do not fully utilize all available tools that build long-term relationships with customers and increase sales volume.

According to a study conducted by Forrester analysts, in the coming year about 44% of medium-sized companies engaged in trading and distribution are planning to implement e-commerce tools with greatest emphasis on solutions for managing customer loyalty, price and promotions. It is no longer enough just to open a web shop. According to 62% of respondents, there is a need for effective promotion, increased loyalty (44%), planning offers (50%) and more effective management of demand (48%).

There is also a very clear trend on the market, indicating that the Internet users are slowly moving away from the formerly popular auction sites to Internet shops. These, in turn, introduce new functionalities, 70% of them use electronic forms of payment, alternative forms of delivery and enhanced customer loyalty programs.

E-businesses are increasingly using solutions dedicated for their service profiles, but also benefit from offers addressed to the entire sector, which in time become standards. According

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[50] http://www.ptzp.org.pl/files/konferencje/kzz/artyk_pdf_2009/114_Soltysik-Piorunkiewicz.pdf 06.06.2012

[51] http://www.ecommerce.edu.pl/inne/wywiady/raport-e-commerce-index-jaki-jest-polski-e-handel.html 01.06.2012

[52] S. Kotylak: Analysis model of control and audit influence on the economic aspect of enterprise's business, Management .- 2009, Vol. 13, no 2, s. 155.

to a Gemius report[53] nearly 75% of the stores questioned provide payment options via systems with which the transaction is much faster and more convenient. Even banks now offer special cards for making purchases on the Internet. Stores have also conquered social networking sites, giving away fuel vouchers, discounts on services, rewarding for almost every activity carried out within the store or site, and the ideas are still coming.

The Polish e-commerce market in 2012 will be the fastest growing market in Europe, where growth is expected to average 16.1%, compared to 24% in Poland. Last year, the share of e-commerce in the entire retail sales in Poland was 3.1%, and it will rise to 3.8% this year. Despite the high growth rate, however, Poland is still far from the financial performance of e-commerce in other European countries.

According to the Forrester Research report, "European Online Retail Forecast: 2011 to 2016", it is estimated that sales in e-shops in 17 major markets in Europe will increase from 96.706 million in 2011 to 171 million EUR in 2016. Poland, although it has the highest growth rate, still lags far behind in comparison with other countries.

SWOT analysis of e-commerce market in Poland

The SWOT analysis rests on the assumption that the strengths and weaknesses are characteristics of e-commerce and e-services in Poland, while the opportunities and threats describe external factors that impact on these areas of electronic trading.

Table 2: SWOT Analysis of e-commerce market in Poland

Strengths:	Weaknesses
• satisfactory number of adequate computer hardware in enterprises • steadily improving access to • broadband Internet connections in enterprises • High level of computerization • of banking and widespread electronic banking in enterprises • Wide range of software dedicated for small and medium enterprises • The dissemination of the Internet as an electronic medium among Poles • Improving range of goods in online shops	• Enterprises not making use of e-commerce on a large enough scale • Lack of integration between internal information processes within companies with electronic data exchange between partners on the market • Lack of IT tools customized to suit the business needs of enterprises • Lack of transparency and clear rules for application of legal regulations in the field of electronic trading • Lack of confidence in the Internet as a place to conclude commercial transactions[54] • Insufficient awareness of the existence of solutions which provide high level of safety to IT systems
Opportunities	Threats
• Intensive growth of Internet penetration • High dynamics of the B2B and B2C e-commerce markets • Increasing availability of online	• Underdevelopment of eGovernment services • Little impact of strategic documents in the area of interoperability on business activity

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[53] http://www.gemius.pl/pl/raporty/2012-02/01 12.02.2012

[54] Matulewski M.: Selected problems of competitiveness in supply networsks. [in] New insights into Supply Chain. Grzybowska K.(eds.), Publishing House of Poznan University of Technology, Poznań 2010, s. 159-172.

services to citizens and entrepreneurs and growing interest in those services • Interoperability standards laid down in the act on computerization • Global and open standards created by international standardization institutions which deal with electronic trading • Lower prices of ICT services • Significant impact of newly established • enterprises on increase of innovation in the area of IT • Treating IT technology, as a new way to win customers • Good prospects for development of mobile services	• No tradition of use in business and delay in dissemination of functional and cost-effective technological solutions dedicated for small and medium enterprises • Possible breach of privacy and personal data protection related to the use of positioning services and RFID

Source: Own work.

The use of the Internet in marketing

The Internet is an effective tool that can be used to promote a brand, service or product. It offers the opportunity to reach out to current and prospective customers, conduct market research and explore new markets. The constantly growing number of Internet users stimulates an increase in interest in the Internet as an advertising medium. This brings financial benefits to the most often visited web sites that sell some of their web space to advertisers.[55]

The Internet is a new medium that exerts a growing influence on business activity, and also contributes to changes in marketing. Owing to its unique features, it affects both the shape of the strategy, as well as tactical and operational activities aimed at satisfying the needs of customers. It affects every instrument of the marketing mix. In particular, it affects promotional activities leading to the development of concepts such as direct marketing, mass customization, interactive communication with consumers or permission marketing. The Internet has contributed to the emergence and development of new tools – web sites, banners, search engines, directories, forums and newsgroups, e-mailing. E-promotion is playing a more and more important role, and although today it usually only supports traditional promotional activities, it is expected that more and more campaigns will be based on the web as the main medium. The role of web promotion is growing and will continue to grow, so that in the future no brand will attain a certain potential without web promotion.

Internet advertising

It should be noted that advertising on the Internet is an addition to traditional advertising media, such as newspapers, radio, television or direct advertising. Its characteristic feature is the ability to effectively reach narrow audiences. Due to the advent of this technology, a new media description language, charging methods, and agencies specializing in the sale and purchase of advertising space on the Internet have emerged.[56]

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[55] D. Siegel, *Futurize your company. Business strategy in the era of e-customers*, Wydawnictwo IFC PRESS, Kraków 2001, p. 173.

[56] A. Banach, http://www.e-mentor.edu.pl/artykul_v2.php?numer=13&id=250#30

It is necessary to point out the advantages of online advertising. These are primarily:[57]]

a) global reach – communication over the Internet has no geographical or time barriers. This gives advertisers the ability to target advertising messages towards potential customers around the world;

b) interactivity – this feature enables maintaining bilateral contacts with users of the Internet;

c) low cost – the Internet is considered to be the cheapest advertising medium. In this way, it allows small businesses to organize advertising campaigns, which could not be carried out in the press, radio and television because of the high cost;

d) flexibility – all stages of the campaign can be monitored. In the case of the Internet, the advertiser can continually analyse the effects of various forms of advertising;

e) profiling customers – the possibility of gaining interest of the target group is one of the biggest advantages the Internet. Unlimited access to different consumer segments allows companies to make contact with the desired audiences.

Of course, the disadvantages of Internet advertising should also be pointed out, and they are as follow:

−   limited access to the network, resulting in the fact that using only Internet advertising, advertisers cannot reach the whole society;

−   lack of representativeness of Internet users;

−   psychological resistance against the new medium – the reasons for such attitudes can be traced to misunderstanding of how this new medium functions, as well as to the individual characteristics of each person.

The Internet offers many different types of advertising. It all depends on what is to be advertised and what form of advertising is most appropriate.[58]

The key forms of internet marketing include in particular:[59]

−   positioning websites in search engines,

−   sponsored links,

−   social media marketing,

−   e-mail marketing,

−   banners.

Among the wide selection of methods and forms of marketing, the most popular for many years has been positioning in search engines (SEO), which is currently used by more than 80% of enterprises. This tool allows website owners to increase traffic to their websites coming directly from search engines. The higher a web page appears after typing a certain keyword or phrase in a search engine, the more likely it is to be visited by Internet users, which increases the chances of gaining new clients. Most members of the information society use the World Wide Web as a primary tool to search for local businesses, and 60% of those users later make purchases in the shops they found, which is why the vast majority of the companies analysed use this method of promotion on a smaller or larger scale.[60]

Second in terms of popularity is advertising in search engines as sponsored links in the form of PPC (Pay Per Click)[61]. PPC tools are assumed to allow accurate determination of the recipients of advertising messages, primarily by matching ads to a selection of phrases and keywords that the user searched for. Using control tools, the advertiser may determine what message the web surfer will read, check the performance (click-through rates), calculate daily

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[57] P. Adamczewski: *The Internet in business practice*, Wydawnictwo AE w Poznaniu, Poznań 2001, p. 78.

[58] A. Dąbrowska, M. Janoś-Kresło, A. Wódkowski, *E-services and the information society*, Wydawnictwo Difin, Warszawa 2009, p. 114.

[59] A. Sznajder, *Virtual Marketing*, Oficyna Ekonomiczna, Kraków 2000, p. 27.

[60] E-commerce Report, Internet Standard, 5th edition, September 2011, p. 26.

[61] S. Collin, *Marketing on the web*, Wydawnictwo Felberg SJA, Warszawa 2002, p. 51.

costs and accurately determine the budget for the entire marketing campaign. These advantages have significantly contributed to the strong growth in the popularity of this form of online advertising. Another factor has been the chance that the web address of the online store will be displayed on the first page of the search results. Positioning a website to appear on the first page of search results in search engines (e.g. Google) is currently a very difficult task, given the fierce competition among companies doing business on the Internet. However, buying keywords appropriate for the given industry results in the address of the shop showing among the sponsored links on the first page. With the growing interest in PPC, the costs of promotion go up as well, as the position of the advertised web address is determined via a mechanism of bidding between the companies that pay for the same keywords. Website positioning and sponsored links are used both by shops that have been on the market for a long time, longer than 10 years, and by those that have appeared on the market only recently. Diversification of the various forms of advertising on the Internet has been complemented by social media marketing. Its popularity has grown extensively in recent years. Social media, until now used as the social channels of communication between Internet users, are beginning to play a significant role in the field of e-commerce.

A significant increase in e-mail marketing has been reported, which was used by 47% of online stores.[62] The increase in popularity of social networking sites did not result in reduction of interest in e-mail marketing. Users of social media sites check their e-mail boxes more frequently than other Internet users. Every third respondent company takes advertising beyond the Internet, as well as uses visual advertising.[63] Banners are the oldest and still popular form of online advertising. The effectiveness of banners used to be determined by the value of the click-through rate, but currently this ratio began to decline drastically, due to the overwhelming prevalence of banners and their high invasiveness. Currently, visual advertising is used as brand promotion, a way to inform about the existence of the company or building product brands, because of its huge creative potential.

Social Media Marketing – the essence and applications
Social Media Marketing is a field of Internet marketing involving indirect promotion through communication with potential customers through social networking sites or blogs, by posting or sharing articles, videos and images. Social media is a communication channel to allow interaction between Internet users, using technologies such as blogs, forums, discussion groups, wikis, podcasts, emails, instant messaging, VoIP, sharing music, videos and photos.[64]

The Internet is a channel for companies to reach millions of potential consumers. Many organizations want to reach them using the opportunities offered by social media. Especially so, because they allow for an open debate on specific products or services, and the large number of consumer feedback expressed on the web is a chance for companies to benefit from collective intelligence.

This, in turn, may stimulate the development of their innovativeness – companies can offer new products and services, and implement innovative business solutions.

With social websites, consumers have the opportunity to take a number of actions shown in Figure 2. Owing to the speed in the transmission of information and the possibility of joint action, consumers can effectively influence the image of the company and sometimes even create it.

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[62] E-commerce Report, Internet Standard, 5th edition, wrzesień 2011, p. 26.
[63] Ibidem.
[64] http://socialmedia.pl/tag/social-media-definicja/ z dnia 10.01.2012

Figure 2. Consumer behaviour on the web.
Source: *Community business – a new era in business communications*, Report based on the audit *Polish companies on Facebook – social websites in marketing communications of Polish enterprises*, Deloitte Poland 2012, p. 6.

It should be stressed that social media is treated as a kind of social networking revolution that has both staunch supporters and opponents. Discussions and disagreements may involve a number of issues. It is arguable, for example, whether we are dealing with a revolution, or perhaps an evolutionary transition to the next stage of development of the information society how much novelty the new media bring, and whether social media are a step forward, giving new opportunities for marketers, or maybe a step back, making their work harder, whether marketing in social media is based on creative marketing solutions, or the opposite - it is very simple, not to say primitive marketing.[65]

No matter how social media are seen and to which of the above groups one belongs, it must be admitted that social media have enormous potential. It is worth noting that what is happening on the Internet may be just a prelude to the real revolution that will form the pillars of the economy of global communication.[66] ftn23 There is no doubt that the traditional business models of companies that use the Internet in their operations do not meet the expectations of their young net-surfing customers, who are open to new ideas and changes. Companies, however, recognize this problem as they adapt and test new solutions and look for potential clients on various social networking sites. These types of websites are gaining popularity, regardless of the latitude, age, gender or skin colour of their users. Of course, the people most open to this kind of novelty are the very young. The degree of popularity of social media decreases with the age of the users. However, it is characteristic that these "older" age groups saw the largest increase in the number of social media users in the years

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[65] B. Gregor, M. Stawiszyński, *How enterprises use social media*, Zeszyty Naukowe Uniwersytetu Szczecińskiego no 702, Ekonomiczne Problemy Usług no 87, Szczecin 2012, p. 252.

[66] B. Gregor, M. Stawiszyński, *From e-commerce to social commerce – changes in electronic commerce and the Internet and e-clients (trends and challenges)*, *Internal Trade* 2011, 9/10, pp. 209–214.

2008-2010.[67] It can also be observed that the opening of companies to the new opportunities offered by social media depends on the industry in which a given firm operates. Globally, social media are used most enthusiastically by educational companies. Almost three-quarters of these companies (72%) use social media. Second is the communications sector (71%), and third and fourth, respectively, are services (66%) and sales (64%). The potential of social media is yet to be discovered by representatives of many companies operating in the energy sector (32%).[68]   It is also characteristic that companies which have been on the market longer, use social media more extensively. According to JBrief Inc., social media have been fully integrated with business models of nearly three quarters of American companies operating on the market for over two years.[69]

A report by Deloitte for Facebook Inc., published in 2011, showed that owing to the activities of Facebook and its related companies, 27 countries belonging to the EU and Switzerland earned 15.3 billion euros. The portal has become a global phenomenon, and not just because it gave rise to a new model of communication among Internet users. Its unique position results from the economic impact it has on other entities. These results show that Facebook affects the economies of countries[70] both in a narrow sense, through the daily activities of the company itself, as well as in a wider spectrum of the activities of third parties that use its ecosystem.[71]

Evaluation of the use of Social Media in Poland

There are 1.67 million businesses in Poland, and currently more than 5% of them, i.e. 70 thousand Polish companies and brands[72], have accounts on Facebook. However, despite the fact that social media are increasingly regarded by most companies as the key pillar of communication between them and the consumers/customers, business organizations have still have much to do in this field.[73]

Social networks can be an effective tool to attract new and maintain existing customers and employees, and may be helpful in developing innovative projects and take part in building the image of a brand close to consumers.

The highest percentage of companies involved in the Deloitte study[74] uses social media due to their positive impact on the image of the brand (59%), and also because this is the market trend and their competition is using social networks (62%). These numbers indicate that the directors and managers of Polish companies still do not fully realize how much can be achieved through an active presence on the web and well planned social media strategy. Awareness of the versatility of these media and of the specific effects that can be achieved through them is low. Especially undervalued seem to be the benefits for recruitment (HR departments). Only 28% of companies use social media for recruitment purposes. Their

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[67] *Generations 2010*, Pew Internet & the American Life Project, December 16, 2010 in: B. Gregor, M. Stawiszyński, *Use of social media in enterprises*, Zeszyty Naukowe Uniwersytetu Szczecińskiego nr 702, Ekonomiczne Problemy Usług nr 87, Szczecin 2012, p. 253.

[68] *The New Conversation, Taking Social Media from Talk to Action*, SAS, Harvard Business Review, October 27, 2010.

[69] *The State of Social Media for Business*, SmartBrief Inc., November 3, 2010.

[70] In Poland, taking into account the GDP and popularity of Facebook, this can be estimated at around 150-200 million EUR annually.

[71] Report *Measuring Facebook's economic impact in Europe*, Deloitte, 2012

[72] *Small and Medium-Size Enterprises in Poland*, PARP, Warszawa 2011

[73] A. Budziewicz-Guźlecka, Management of changes, in enterprises as a form of adaptation to e-economy, Scientific Journal No. 681, Service management vol. 8, Szczecin 2012, s.199.

[74] *Community business – a new era in business communications*, Report based on the audit *Polish companies on Facebook – social websites in marketing communications of Polish enterprises*, Deloitte Poland 2012

potential in this field, however, is quite large – a carrier of image-building content, a tool for verifying the competence of candidates, an interactive platform to build long-lasting, deeper relationships with the community gathered around the company.[75] Figure 3 presents the objectives of presence in social media.
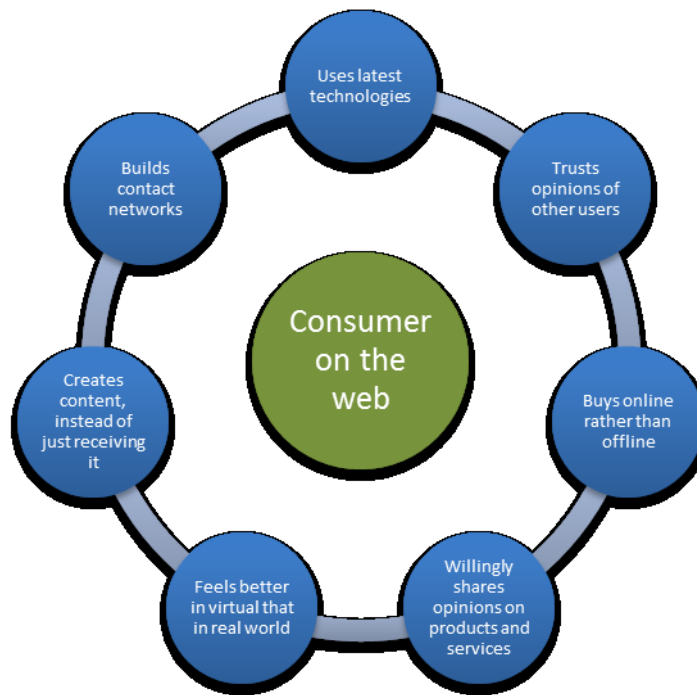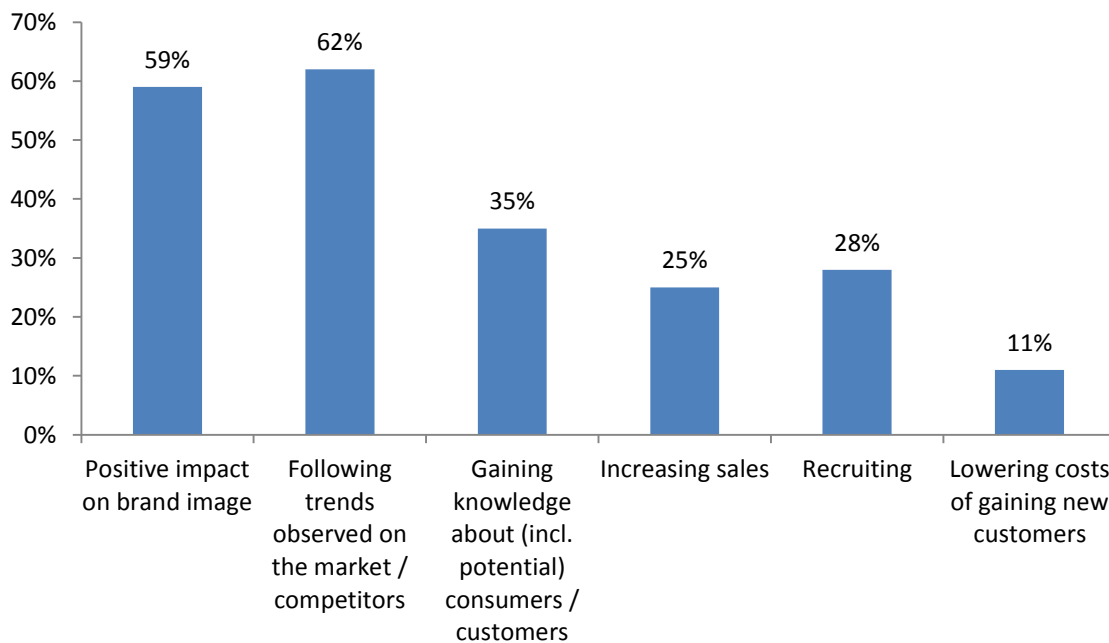

Source: *Community business – a new era in business communications*, Report based on the audit *Polish companies on Facebook – social websites in marketing communications of Polish enterprises*, Deloitte Poland 2012.

Another issue to discuss is the direction in which communication is achieved through social media. Firms interact in social media mainly with consumers/clients and potential consumers. Internal communications, recruitment goals and business cooperation are secondary. At the same time, few businesses reported that they use social media to gain knowledge about the consumers/customers (including potential), increase sales and reduce the costs of obtaining clients. Relatively few companies use social media to engage in dialogue with potential employees, and even fewer use the opportunity to utilize these dynamic media to improve internal communication and dialogue with their employees. Companies should take it into account that current and potential employees will express opinions about them on-line anyway. It should be noted that a lack of engagement limits control over what happens with the image of the employer. Moreover, as in the case of recommendations of satisfied consumers/customers, the recommendations of satisfied current and former employees are the most reliable and portals such as glassdoor.com are becoming places for exchange of information about employers. 78% of respondents in the survey "Candidates 2.0" said they would reject a job offer from an employer that has a bad reputation among their friends.[76] Figure 4 shows the target groups with whom entrepreneurs communicate using social media.

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[75] Survey *Candidates 2.0*, Employer Branding Institute
[76] Survey *Candidates 2.0*, Employer Branding Institute
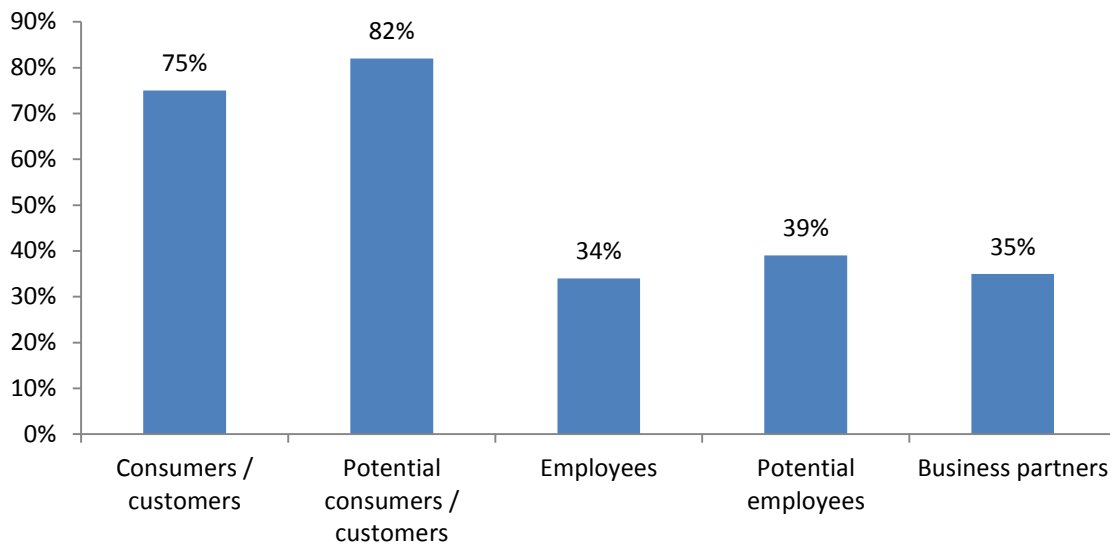
Source: *Community business – a new era in business communications*, Report based on the audit *Polish companies on Facebook – social websites in marketing communications of Polish enterprises*, Deloitte Poland 2012.

An important aspect which needs to be mentioned is the approach to using social media in the future, and whether entrepreneurs have strategies for their activities in social media. Unfortunately, this area is clearly neglected.

The vast majority of companies do not have a separate strategy for social media activities. 15% per cent do not have a strategy at all, 43% of companies in the survey have indicated that their actions in the social media are part of their marketing strategy and support traditional marketing and PR activities. Only 17% of companies have a specific strategy for the social media, fully integrated with their business development strategy and marketing plans.

A strategy for brand presence in social media is a concrete plan of actions to achieve predefined, measurable results, which has clearly defined criteria for evaluating effectiveness. Lack of a strategy or a mismatch with the company's strategy eliminates the main benefits of activities in social media, increases the cost of communication and increases the risk of mistakes. Lack of a strategy equals a greater risk of failure.

Social media pervade all areas of social and economic life. In order to use them effectively, companies should see more in them than just modern technology and risk. Regardless of the industry in which a company operates, its top management should approach these media in the most practical manner possible.

It is necessary to clearly define business objectives, define the target group, and choose the most effective way to use social media to achieve the predefined goals.

Conclusion

The Internet is the driving force behind today's economy, creating opportunities and chances for business development worldwide. Internet technologies are developing very intensively, and the quality of the telecommunications infrastructure is improving systematically, new media providing access to the Internet are being offered. This result is a growing number of

Internet users. Structures and business profiles transform under the influence of technology and the e-commerce sector is developing intensively.

It seems that the serious barriers that used to restrict the development of e-commerce a few years ago, have now disappeared. In turn, the opportunities that have emerged on the market provide a very good environment for the development of this market in the future.

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Mehmet Sinan Erguven

Eyes Wide Shut: How Do the Customers Perceive and Judge Advertising Creativity?

Abstract:
Different groups have different perceptions about advertising creativity. When it comes to judging the creativity of an advertisement, there can be different factors to be used by different groups. An early research showed that brand managers are keen on relevance factors of creativity while agency creative directors have a more detailed understanding of originality in Turkey. The interviews with the advertising agency creative directors and brand managers showed that Turkish advertising sector uses three divergence and four relevance factors to judge advertising creativity. Same study also elucidated that some factors in the literature are not used and some have different definitions in the Turkish advertising sector. On the other hand creativity of an advertisement is mostly used to attract attention to the information about the brand and it is well known that consumers are inclined to avoid from ads. So understanding the customers perceptions and judging factors of advertising creativity are also important. A sample of 340 university students from the business administration faculty will judge award-winning advertisements from their creative perspective. This study will try to enlighten the different perceptions and judgment factors of advertising creativity among professionals and customers.

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Zhijun Yu

Patterns of Chinese Contractual Projects in Africa and Implications to Latin America

Abstract:

This paper studies the pattern and determinants of contractual projects by Chinese contractors in Africa and implications to Latin America. Contracts by Chinese in Africa are a dominant component of Chinas economic relations with Africa. It exceeds Chinas foreign direct investment and labor export in value. While similar to direct investment, contracts are based on some different considerations and are therefore subject to different determinants from foreign investment. We explore the impacts of a set of economic as well as political variables on Chinese contracts and find that among all variables, the mining and quarrying output of the country has a positive effect on Chinese contracts. Those countries that are rich in natural resources tend to gain more Chinese contracts than others. In addition to natural resources, we also look into the effects on contracts of market size, population, economic growth, education, inflation, regime type, governance, and bilateral relations with China. This is the first empirical study that has ever been conducted on Chinas contracts overseas.

Pedro Ferreira

Gabriela Cardoso

Is the Grey Market Uniform? Segmenting Cosmetic Grey Market Through Lifestyles and Buying Behavior

Abstract:

The aging of the world population is a much debated issue because of the consequences this demographic phenomenon has on several areas of societies. Through the analysis of statistics on world population it is notorious the growing trend for societies to get older. According to some forecasts, it is expected that seniors will exceed the number of young people by 2050 (Sudbury and Simcock, 2009). The growth of this population group makes it crucial to understand how these individuals live and consume. Using the consumption of cosmetic products as a framework, the goal of this study is to understand what describes the senior female population, namely regarding their lifestyles, and then, to understand what is their behavior towards the cosmetic products. To achieve this double goal it was conducted a primary data collection from 300 women above the 55 years of age. The survey included questions related with lifestyle, buying behavior of cosmetic products and demographics. The strategy of analysis was based on data reduction techniques namely factorial analysis and cluster analysis. The first technique was used to reduce the lifestyle variables to their main components.

Halil Ibrahim Gürcan

Social Media and Local Culture: A Content Analysis for Turkish Village Pages on Facebook and Twitter

Abstract:

Thanks to the spread of the internet to larges masses, it is now more often observed in all aspects of daily life routines. The opportunities to use the internet for a variety of activities ranging from banking to information gathering and job applications make people's lives easier. In addition to its use in business sector, the internet has been a place for many websites aiming at contributing to socialization and the entertainment of the users at universal level. The concept "global village" suggested by McLuhan has been acknowledged more thanks to the social networks emerged on the internet and attracted many fans at global level. This new trend also affected the people living in rural areas and they prepared web pages for their villages and therefore initiated a new means of communication.

Local cultures now have the opportunity to introduce themselves to a larger audience through the internet. The village websites designed and published have been an important step to provide information about the history, culture and life conditions of each village and share this information and communicate with those who already left the village and started to live somewhere else.

In addition to web pages available, the groups and pages created on social network websites also made it possible for those still living in the village and those migrated to share and communicate with each other. In this study, the contents of 50 groups or pages about villages created on Facebook and Twitter will be analyzed.

Keywords: Facebook, Twitter, village page, e-village, rural communication, local communica-tion.

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Urbano Bueno Hernandes Jr.

Leonardo Fernando Cruz Basso

Public Bus Passenger Transportation Company Efficiency Assessment Using the Data Envelopment Analysis

Abstract:
The performance appraisal measures developed and applied at companies allow them to carry out self-assessments and to seek improvement plans, among others. One of the ways of seeking refinement is through the use of benchmarking, in which companies become involved in a learning system, comparing organizations or even sectors. One of the tools for applying benchmarking is the use of Data Envelopment Analysis (DEA) which identifies those, among several productive units, that are efficient and inefficient. An attempt was made to ascertain whether there is a relation between operationally efficient x financially efficient companies. The preliminary results did not allow the corroboration of the hypothesis of a relation with statistical significance between operational efficiency and financial efficiency. Keywords: Performance Assessment, Learning, Technical Efficiency, Linear Programming, DEA, Public Transportation by Bus.

Keywords: Performance Assessment, Learning, Technical Efficiency, Linear Programming, DEA, Public Transportation by Bus.

Introduction

The municipal transportation system of the city of São Paulo
According to the Brazilian Institute of Geography and Statistics (IBGE), the population of the city of São Paulo surpassed 11 million inhabitants in 2010. If we take into account the 38 municipalities that compose the metropolitan region of São Paulo, we will arrive at approximately 17 million people. According to data from the Municipal Department of Transportation of São Paulo, 55% of motorized trips in this region take place by public transportation, totaling six million passengers transported per business day.
To meet the passenger demand in the city, São Paulo Transporte S/A manages the concession of lines to various bus companies, all of private enterprise. Today, the system is operated by 13 consortiums, formed by 28 companies and cooperatives, responsible for the operation of 15 thousand vehicles on almost 1,500 lines.
Besides the buses under the management of São Paulo Transporte S/A, the city of São Paulo is served by Companhia do Metropolitano de São Paulo and by CPTM – Companhia Paulista de Trens Metropolitanos, controlled by the state government, which together transport about 3.5 million passengers/day, according to the official website of SPTrans.

To link São Paulo to the city's other regions, the metropolitan bus system, under the responsibility of EMTU, also subordinated to the state government, offers an extensive network of lines operated by privately held companies, an intercity corridor on a separate lane with diesel bus and trolleybus trunk lines, besides a special highway service, which covers the Guarulhos International Airport.

São Paulo Transporte S/A - SPTrans, the name adopted on March 8, 1995 to replace the former C.M.T.C – Companhia Municipal de Transporte Coletivo, has the planning and management of the public bus transportation system in São Paulo as its business purpose.

All the bus lines are operated by concessionaires, under the supervision of SPTrans. The latter issues operation service orders for each line, including definition of routes, hours of operation and necessary fleet. Ticket payments can be made by users in cash or by means of a card called "Bilhete Único" (like Unified Ticket). The abovementioned managing body also coordinates the implementation and/or use of the bus corridors and bus terminals of the municipality.

The current model of municipal public transportation in São Paulo splits the city up into nine different areas, whereas plots were established for eight of them (1 - Northwest, 2 - North, 3 - Northeast, 4 - East, 5 - Southeast, 6 - South, 7 - Southwest and 8 - West) for the distribution of the companies and cooperatives that render the transportation services by bus, microbus, van and trolleybus.

Area 9 is that of the central region of the city, which does not have specific plots, so that there is no company or cooperative operating specifically within these limits. The lines that operate exclusively within the limits of area 9 come under the responsibility of companies from areas 1 to 8, usually that located closest to the point considered the starting point of the line (a rule that has several exceptions).

The Municipal Transportation System comprises an integrated network, created by the Municipal Department of Transportation in 2003, together with SPTrans. This network allows faster travel and rationalization in the use of the means of transportation in the city. This system is composed of two subsystems:

a)   Structural Subsystem

Formed by lines operated by medium and large vehicles (articulated, bi-articulated and common), designed to handle considerable passenger demands and to link various regions of the city to its central region. It is the backbone of public transportation.

b)   Local Subsystem

Feeds the structural grid and caters to internal travel in the subcenters with lines operated by common buses and smaller vehicles, such as micro- and minibuses.

To facilitate the organization of the lines, the city was divided into eight areas, each one with a different color and operated by a consortium and a cooperative, as seen in Figure 1:

Figure 1 – Districts and areas of public transport of the city of São Paulo
Source: SPTrans

SPTRANS - Divisão das áreas do transporte coletivo
da cidade de São Paulo - Separado por distrito

Área 1 - Noroeste   Área 6 - Sul
Área 2 - Norte   Área 7 - Sudoeste
Área 3 - Nordeste   Área 8 - Oeste
Área 4 - Leste   Área 9 - Centro
Área 5 - Sudeste

1. Anhanguera
2. Brasilândia
3. Cachoeirinha
4. Freguesia do Ó
5. Jaguará
6. Jaraguá
7. Limão
8. Perus
9. Pirituba
10. São Domingos
11. Casa Verde
12. Jaçanã
13. Mandaqui
14. Santana
15. Tremembé
16. Tucuruvi
17. Vila Guilherme
18. Vila Maria
19. Vila Medeiros
20. Cangaíba

21. Ermelindo Matarazzo
22. Itaim Paulista
23. Jardim Helena
24. Lajeado
25. Penha
26. Ponte Rasa
27. São Miguel
28. Vila Curuçá
29. Vila Jacuí
30. Tatuapé
31. Aricanduva
32. Artur Alvim
33. Carrão
34. Cidade Líder
35. Cidade Tiradentes
36. Guaianazes
37. Iguatemi
38. Itaquera
39. José Bonifácio
40. Parque do Carmo
41. São Rafael
42. Vila Formosa
43. Vila Matilde
44. São Mateus

45. Cursino
46. Ipiranga
47. Sacomã
48. São Lucas
49. Sapopemba
50. Vila Prudente
51. Campo Belo
52. Campo Grande
53. Cidade Ademar
54. Cidade Dutra
55. Grajaú
56. Jabaquara
57. Marsilac
58. Parelheiros
59. Pedreira
60. Socorro
61. Santo Amaro
62. Capão Redondo
63. Jardim Ângela
64. Jardim São Luís
65. Itaim Bibi
66. Butantã
67. Campo Limpo
68. Jaguaré
69. Morumbi
70. Raposo Tavares

71. Rio Pequeno
72. Vila Andrade
73. Vila Sônia
74. Água Rasa
75. Alto de Pinheiros
76. Barra Funda
77. Bela Vista
78. Belém
79. Bom Retiro
80. Brás
81. Cambuci
82. Consolação
83. Jardim Paulista
84. Lapa
85. Liberdade
86. Moema
87. Mooca
88. Pari
89. Perdizes
90. Pinheiros
91. República
92. Santa Cecília
93. Saúde
94. Sé
95. Vila Leopoldina
96. Vila Mariana

Chart 2 – Companies that form the consortiums

Area	Consortium	Companies
Area 1	Consórcio Bandeirante de Transporte	Viação Gato Preto Ltda. / Viação Santa Brígida Ltda.
	Consórcio Transcooper Fenix	Fênix – Cooperativa de Trabalhadores no Transporte Coletivo da Grande São Paulo Transcooper – Cooperativa de Trabalhadores dos Profissionais no Transporte de Passageiros em Geral da Região Sudeste
Area 2	Consórcio Sambaíba	Sambaíba Transportes Urbanos Ltda.
	Consórcio Transcooper Fênix	Fênix – Cooperativa de Trabalhadores no Transporte Coletivo da Grande São Paulo Transcooper – Cooperativa de Trabalhadores dos Profissionais no Transporte de Passageiros em Geral da Região Sudeste
Area 3	Consórcio Plus	Expandir Empreendimentos e Participações Ltda. VIP Transportes Urbanos Ltda.
	Consórcio Aliança Paulistana	Associação Paulistana dos Condutores de Transporte Complementar da Zona Leste Coopernova Aliança – Cooperativa de Transporte Alternativo Nova Aliança
Area 4	Consórcio Leste 4	Ambiental Transportes Urbanos S/A (formerly Himalaia) Empresa de Transportes Coletivos Novo Horizonte S/A
	Consórcio Transcooper Fênix	Transcooper – Cooperativa de Trabalhadores dos Profissionais no Transporte de Passageiros em Geral da Região Sudeste
Area 5	Via Sul Transporte Ltda.	Via Sul Transportes Urbanos Ltda.
	Consórcio Aliança Cooperpeople	Coopertranse – Coop. Dos Trab. Espec. em Transp. de Pass. em Geral no ESP Coopernova Aliança – Cooperativa de Transporte Alternativo Nova Aliança
Area 6	Consórcio Unisul	TUPI Transportes Urbanos Piratininga Ltda. / Viação Cidade Dutra Ltda MobiBrasil Transporte Urbano Ltda. (formerly Metropolitana) VIP Transportes Urbano Ltda.
	Consórcio Authopam	Cooperativa dos Trabalhadores Autônomos Transporte de São Paulo – Cooper Pam Consórcio dos Trabalhadores em Transporte Coletivo de Passageiros e de Cargas do Estado de São Paulo – Cooper Líder
Area 7	Consórcio 7	Transkuba Transportes Gerais Ltda. / Viação Campo Belo Ltda. Viação Gatusa Transportes Urbanos Ltda. / VIP Transportes Urbanos Ltda.
	Consórcio Authopam	Cooperativa dos Trab. Autônomos em Transp. De São Paulo Cooper Pam
Area 8	Consórcio Sudoeste de Transporte	Viação Gato Preto Ltda. / OAK TREE Transportes Urbanos Ltda. Transppass Transporte de Passageiros Ltda.
	Consórcio Unicoopers Cooperalfa	Cooperalfa – Cooperativa de Trabalho dos Condutores Autônomos Unicoopers – Coop. Unificada de Transp. Coletivo Urbano de Passageiros

Source: SPTrans

All the companies listed above received codes in order to preserve the secrecy of each one.

The importance of efficiency in the public transportation industry
The Municipal Transportation System has to work more and more often with a growing population that uses public bus transportation systems and with resources that do not always keep up with the growth in the number of passengers transported.

To this effect, given that the effectiveness of transport lies in offering transportation that satisfies the needs of the user population, and efficiency means delivering this service with minimal consumption of resources, it is important to emphasize that efficiency is just as important as effectiveness, since although companies have to meet the transportation demands of the population, they should do so by optimizing resources such as investments in new buses, spaces intended to house these buses, labor and inputs such as fuels, lubricating oils and others. Owing to the application of these resources, the companies present various results, such as passengers carried, kilometers covered, generation of cash and profits. In this regard, efficiency is essential to reduce costs per passenger carried and consequently, to increase profitability in an industry that, if it fails to present satisfactory results, at least puts pressure on government agencies to carry out a review of the remuneration, and consequently, of the increase in public transport fares, raising ticket prices.

In the municipality of São Paulo, there is no direct competition between bus companies, and for this reason no mention is made here of competition between companies. Admittedly there is an intersection of lines of different companies on a particular main road in a region, but this intersection has very minor impacts between one company and another. Moreover, it must be considered that a poorly managed company may produce highly detrimental consequences for all the stakeholders, which could result in downtime at the company due to employee protests (if they are late in paying salaries, for instance), delays in the delivery of inputs by suppliers and even losses for the population due to service interruptions or deficiencies.

According to Ferronatto et al. (2009), "being more efficient than another mode does not mean that public transportation is absolutely efficient, and the pursuit of improvements is necessary. Increasing efficiency in the production of the public transportation service thus constitutes a goal shared by all of society, besides the players directly affected: users and operators." Mindful of this detail, SPTrans is constantly implementing new systems and improvement mechanisms, such as the monitoring of the average speed of each operational line, and new fare integration methods with the use of the Unified Ticket.

Efficiency in public transportation

According to Gomes, Mangabeira & Mello (2005), the efficiency analysis of productive units is important (i) both for strategic purposes (ii) and for planning. According to the authors, the comparison between companies (or any DMU - Decision Makers Unit) is an important tool for companies to define strategies, as there is a comparison between them in the use of resources, and in the production of goods or services. In the field of planning, the analysis can indicate how to improve the performance of each one of the productive units, since the distance between actual production and potential production is provided.

The efficiency of a productive unit is measured through a comparison between the observed values and probable values of its products (outputs) and resources (inputs). This comparison can generally be made by the division between the observed production and the attainable maximum potential production, given the available resources, or by the division between the required minimum quantity of resources and the quantity effectively employed, given the quantity of results produced. Combinations of these ratios can equally provide important information.

The use of Data Envelopment Analysis - DEA to measure the relative efficiency of productive units has proven very attractive in several sectors of application. The use of DEA models in transportation can support the decisions of public bodies and managers of public bus passenger transportation companies.

According to Gomes, Mangabeira & Mello (2005), the managers of productive units can support decisions by pointing out the areas of inefficiency and the DMUs that can be

parameters for the actions adopted, i.e., in the indication of benchmarks, as the author demonstrates, for example, in Tupy & Yamaguchi (2002).

This article results from the application of the DEA approach at public bus transportation companies from the city of São Paulo, in the year 2011, with the intention of confirming the relation between operational efficiency and financial efficiency.

The importance of measuring performance

The survival of companies in the market is determined, among other factors, by a relation between the organization's objectives and the operation of its activities. According to Smith (2005), performance management is the key to the attainment of best managerial practices to achieve the goals and objectives of any institution.

This performance management affords, among others, optimization in the use of resources and/or in production, seeking alignment between resources, people, production and efficiency across the company (strategic, tactical and operational levels) so as to maximize income.

According to Hronec (1994), performance measures represent the vital signs of a company. The author sees performance measurement as a means of quantifying the activities within a process or, moreover, of verifying whether its outputs achieve the specific goal, and this process should not present interruptions, i.e., it should be seamless for there to be information feedback, while the company will consequently be able to generate new goals and adapt its strategies.

Besides monitoring the system through the implementation of indicators, the models should also allow constant improvement in the appraised performance, which could be achieved through a comparison of the evaluated units, through a benchmarking process.

The application of benchmarking consists of a comparison of two or more productive units geared towards an investigation of the best processes at companies that lead to a better performance. Through a proactive procedure, it is possible to ascertain how another DMU performs a specific task with the intention of improving the performance of the same task.

Min and Min (1997) cites benchmarking as a continuous process for quality improvement, evaluating its internal strengths and weaknesses and the advantages of the best competitors.

Drew (1997) mentions that benchmarking has become one of the tools used most often for strategic management, owing to the possibility of obtaining learning in a more agile manner. The author also argues that benchmarking interacts with the success of processes, in the development of new products and organizational changes at companies, warning that benchmarking, on its own, does not lead to a competitive advantage as it is geared towards the development and implementation of procedures that are imitators or offer little innovation.

Drew (1997) also declares that benchmarking has been accepted by many organizations as an important organizational learning tool, but draws attention to the limitations of its use. The author asserts that the benefits of its use translate into transmission and absorption of knowledge far beyond the limits of the organization, and that this knowledge can lead companies to reflect on the knowledge acquired.

Operational and Financial Performance Appraisal Measures

As the need to implement a performance appraisal measurement system must be aligned with the company's objectives, many indicators were created as tools that help the organization to achieve its goals.

Having identified the objectives of the appraisal measurement in the organization, it is important to define the model of indicators that will be responsible for measuring performance, in view of the vast range of existing appraisal measures.

As mentioned by Rafaeli & Müller (2007), many proposals have been developed and implemented to measure the performance of processes, areas or companies, including TQM -

Total Quality Management. Other tools such as TOC - Theory of Constraints; IC – Intellectual Capital and the Quantum and Rummler and Brache models were also developed.

Endeavoring to identify the metrics used for financial performance, scholars share the consensus that there are an infinite number of models and indexes. The use of just one of the countless metrics as a single financial performance appraisal measure might not appear reasonable, as each one of them indicates varied benefits and caters to different interests. The various financial performance constructs can offer advantages and disadvantages, depending on the point of view of each stakeholder, and they should be chosen carefully so as not to generate disinformation or biases.

Peterson and Peterson (1996) mentions that the traditional measures of financial performance are all based on accounting data. The major advantage in the use of these measurements is the availability of information, which is all found in the financial statements, besides their easy calculation and interpretation.

The Boston Consulting Group/FGV (1999) mentions that companies have discovered that financial performance measures differing from traditional measures are better at translating performance and assist in the management of companies when making decisions that create shareholder value.

Young & O'Byrne (2001) classify the performance appraisal measures in five categories:

• Residual income measures: consider the cost of capital (own and third party). This measure is characterized as not incorporating the appreciation generated by the market on future growth opportunities. E.g.: CVA (Cash Value Added), Economic Profit, EVA® (Economic Value Added);

• Residual income components: meaning the elements of income that do not include the costs of capital. These components are widely used at the lower levels of the company's organizational structure. E.g.: EBIT (Earnings before Interest and Taxes); EBITDA (Earnings before Interest, Taxes, Depreciation and Amortization), which is the EBIT plus depreciation and amortization; NOPAT (Net Operating Profit after Taxes) and RONA (Return on Net Assets);

• Market-based measures: meaning some measures derived from the capitals market. E.g.: TSR (Total Shareholder Return) and MVA® (Market Value Added). Market-based measures are only possible for public organizations with shares traded in the market;

• Cash flow measures: these are structured to circumvent the influence of the accrual basis used in accounting. E.g.: Cash Flow from Operations; Free Cash Flow for shareholders and CFROI (Cash Flow Return on Investment);

• Traditional income measures: these include the measures that executives and external analysts have focused on for decades. E.g.: Net Income and Earnings per Share.

Finally, Traditional Income measures have the advantage of being available in the financial reports. However, they do not consider the cost of equity and there is the possibility of their manipulation, thus entirely distorting the value created.

In *Measuring Organizational Performance - Metrics for Entrepreneurship and Strategic Management Research*, Carton and Hofer (2006), after a survey of the literature on firm performance, conclude that there is no common point of the variables that should be considered when measuring the company. In all, the authors examined five approaches to the economic and financial performance of a company: accounting, the Balanced Scorecard, strategic management, entrepreneurism and microeconomics, whose main characteristics are listed below:

From the perspective of the use of accounting to measure organization performance, there is the advantage of the standardization of the financial statements and of the rigor in record keeping, minimizing bias formation (Carton & Hofer, 2006). Besides this advantage, accounting can also inform the company's value creation.

Finally, the microeconomic perspective where two approaches are covered: Economic Value and the Neoclassical Theory of Production.

In the Economic Value perspective, Barney (2001) mentions that the value created is precisely the value consumed in the use of assets. Contradicting the idea that the company does not present profits, the concept becomes different, since nominal profit differs from economic profit. Economic profit is nominal profit minus the average cost of capital. And average cost of capital is based on future returns adjusted by the risk of operations, while economic profit is equal to the value creation necessary to cater to the interest of investors. Thus, if this value creation is not sufficient to fulfill the minimum required return, the company will have difficulty staying afloat, since there would be a flight of resource providers. On the other hand, if the company generates more value than expected by the market, these manage to attract more resources to meet a higher demand resulting in competitive advantage.

The perspective based on the neoclassical theory of production explains that, at a company, there is an inflow of resources and raw materials (inputs) of all kinds to produce an outflow of products and/or services (outputs). This relation between inputs and outputs can be described through a production function such as, for example, in the case of a product P produced for n inputs X, the function would be as follows:

Koopmans (1951) mentions in his study that a company is efficient if it manages to increase the production of a product without, however, decreasing the production of another. Efficiency can also be understood as profit maximization or cost minimization. Watson & Holman (1979) state that a firm's productivity is the ratio between the goods and services produced and its resources used, as follows:

This microeconomic perspective appears to be the most suitable for addressing a performance measure to gauge the efficiency of transportation companies, which can be applied using the Data Envelopment Analysis approach.

Data Envelopment Analysis

DEA, or Data Envelopment Analysis, can be more easily understood if we clarify some of its concepts and composition, pertaining to the model, such as:

● DMU – Decision Making Unit (DMU) – It is important for these units to have the same resources (inputs) and to obtain the same products (outputs).

● Inputs – meaning the resources (inputs) consumed by the DMUs for desired production; the fewer the resources used, the better for the DMU.

● Outputs – meaning the products (results) generated by the DMUs; the more there is produced, the better for the DMUs.

● Production Plan: meaning the ratio between the units of inputs used and the outputs produced by each one of the DMUs;

• Efficiency Score – meaning an efficiency ranking generated for each DMU, through linear programming. The indicator ranges from 0 to 1, whereas an efficiency score equal to 1, shows the efficient unit(s) in relation to the others.

The DEA approach allows users to allocate various inputs and products to calculate the efficiency of the DMUs. Once the efficient and inefficient companies have been identified, an efficiency border can be built with the efficient units, which will serve as benchmarking for the inefficient units.

Since it is possible to find different sizes of DMUs within a DEA approach, there are two DEA models that concern about their sizes. The CCR model (Charnes, Cooper & Rhodes, 1978), also known as CRS - Constant Returns to Scale,) allows constant returns to scale and understands that there is a proportionality between the input and output variables.

The BCC, or VRS - Variable Returns to Scale (Banker, Charnes & Cooper, 1984) model, assumes that there is no proportionality between the input and output variables, but instead convexity between them.

Due to the input and production variables, the DEA models can present two orientations: input orientation, which will identify as efficient DMUs those that minimize the use of resources, (ii) and the output orientation, which will measure the efficiency of the DMUs by the efficiency of their production without however, altering their expenditures.

For a performance measurement model for transportation companies, the DEA model to be recommended is the BCC (or VRS), since the units under evaluation present significant differences in scale. An input-oriented model should also be adopted since they are variables closer to being controlled than the output variables.

One of the recommendations in the use of this approach (DEA) is the definition of how many input and output variables should be used. Depending on the sample size, a large quantity of inputs and outputs may result in a border with 100% of efficient DMUs. One of the empirical recommendations is that the quantity of DMUs should be double or triple the quantity of variables. Gonzáles Araya (2003) recently suggested that this number is even higher (4 to 5 times) when, besides the efficiency border, it needs to analyze the benchmarks of the analyzed units.

There is also the possibility of combining the different forces of each one of these approaches in a hybrid method (Tofallis, 2001), where, as a first priority, the border units are identified by the DEA, defined on a surface. This allows a greater advantage in relating multiple results or outputs with multiple inputs to be estimated.

Chart 1 – Summary of some articles on DEA in transportation

Author	Sample	Specification	INPUTS	OUTPUTS
De Borger et al. (2008)	155 local buses from Norway and 55 French bus operating companies	Input orientation. CRS, VRS, CE (cost efficiency) and TE (technological efficiency)	Costs with fuel, costs with driver, other costs	Seats per kilometer
Boame (2004)	30 Canadian bus operating companies. 1990 – 1998	Input orientation. VRS	Buses, fuel, salaries	Revenue per km per vehicle

Cowie (2002)	282 observations made by 58 British bus operating companies 1992-1996	Input orientation. CRS, VRS 2nd stage regression	Employees, vehicles	Km per vehicle
Odeck and Alkadi (2001)	47 largest bus operating companies in Norway	Input and output orientation. CRS, VRS. 2nd stage regression. Mann-Whitney test	Seats, fuel, costs with equipment, hours driven and other employees.	Passengers per kilometer, seats per kilometer
Pina and Torres (2001)	15 Catalonian buses (Spain). The sample year was not informed.	Input oriented. VRS. 2nd stage regression and logit	Fuel per 100 km, subsidy per passenger, cost per km, cost per passenger.	Km covered by bus per employee, km covered by bus per year and per inhabitant, population, rate of accidents, frequency of accidents.

Chart 1 lists some DEA studies for one or more products of local public transportation companies classified by year of publication. The first column shows the author and the year of publication. The second column shows the set of data with the number of observations, number of companies, country, type of operator and period. The third column furnishes information about the type of orientation, presumption of scale, and other methodological information. The fourth and fifth columns show the inputs and outputs.

While there is a consensus about the best input variables to be used, there is a constant discussion about the output variables that should be used.

One group defends the use of supply-oriented pure measures, such as kilometers per vehicle or kilometers per seat, while another group defends demand-oriented measures, i.e., passengers and passengers per kilometer. Those who defend the use of supply-oriented measures argue that demand is not a controlled variable of management. Those who defend demand measures argue that what ultimately counts is the vehicle body since otherwise the companies that drive their buses empty through less congested areas would be the most efficient.

Methodological proposal of preliminary analysis and the database
To evaluate the operational efficiency of bus companies from the city of São Paulo, six variables were selected that indicate the classical relations between production, capital and labor, all from the year 2011. The quantities of lines that each company operates, the average operating fleet, numbers of departures, and the average administrative expense per vehicle were selected as input variables. The variables that represent total passengers and total kilometers driven over the year were used as output variables. Out of all the chosen variables, the only one that could be used both as an input and as an output is the total kilometers driven. If used as an input, it would end up indicating that the shorter the routes for a particular quantity of passengers, the better for the operating company. However, the public transportation managing body of the city manages not only the interest of companies, but

particularly of the population in general, and it understands that the longer the distance driven, the better the service delivered to the population in general.

Chart 2 – Inputs and Outputs used to measure operational efficiency

Operational Efficiency	Input	Output
	Quantity of line	Passengers carried
	Fleet	Kilometers driven
	Departures	
	Expenses per vehicle	

In the evaluation of the financial efficiency of these companies, seven variables were selected that form economic and financial efficiency metrics. The total assets of the company, shareholders' equity and the average administrative expense per vehicle were used as input variables. As outputs, the variables represented total net revenue, net income for the current year, current ratio and return on assets. In transportation, and quite possibly in other industries, one of the recurring concerns is the payment capacity of suppliers, especially during recessions or in times of crisis. This capacity provides the company with the assurance that there is no interruption in the supply of inputs, and for this reason the liquidity indicator was added to the model. Return on Assets is also an important indicator, as it represents the return on its operational activity, of crucial importance to the shareholders.

Chart 3 – Inputs and Outputs used to measure financial efficiency

Financial Efficiency	Input	Output
	Total Assets	Net Revenue
	Shareholders' Equity	Net Income
	Expenses per vehicle	Current Ratio
		Return on Assets

It should be observed that a certain degree of homogeneity is required among DMUs for their definition. In this analysis, it was confirmed that all the companies operate only with passenger transportation, are circumstantiated in the same city, have the same variables and follow the determinations of the same managing body. Accordingly, none of them had to be excluded due to lack of homogeneity.

The model of choice was the input-oriented DEA BCC, since there are significant differences in scale between DMUs, and the objective is to verify whether the production obtained justifies the quantity of resources allocated. The same output-oriented model was also applied. The results of the DEA model were obtained using the DEA-Solver software, available at _www.saitech-inc.com_. Judging by the variation existing in the size and in the characteristics of the companies, the hypothesis of constant returns to scale would be inappropriate, which justifies the choice of a model of variable returns (DEA BCC model).

In the outlier detection analysis of this study, two DMUs were found to be present with a high current ratio (CR-42.54): PA32 and PA3252. In verifying the first type of ratio cited by Bogetoft (2011), the veracity of the data was confirmed. No technological innovation or new management practiced was verified either, indicating that there may have been some excess inflow of cash on the last days of the fiscal year, reflecting a value that is not normal with the sample, which caused its removal.

Thus, having observed all the stages for assembly of the model, the input-oriented DEA BCC model was run with operational data, obtaining an efficiency score ranking the companies from most efficient to least efficient. The input-oriented DEA BCC with financial data was run concomitantly, also obtaining an efficiency score ranking the companies.

With the obtainment of the two scores, operational and financial, Pearson's Correlation was applied to show the level of adhesion between companies with operational efficiency and with financial efficiency. A Scatter Diagram was also generated with the purpose of verifying the behavior between operational and financial results.

After this first round, some tests were carried out to verify the behavior of the efficiencies with another model: the product-oriented BCC. Following the same stages for the input-oriented BCC, the testers thus found two scores ranking the companies, to which Pearson's Correlation and Scatter Diagram were applied.

The sample consists of public bus transportation companies from the city of São Paulo. Initially, 39 DMUs were detected, but after some had been eliminated, 27 remained for analysis. The elimination occurred as they did not all have the necessary information to apply the model. Units PA21, PA22, PA31, CA41, PA52, CA64, CA74, PA71, CA83 and PA11PA21 did not have financial statements for 2011, and were excluded from the sample. Units PA32 and PA32PA52 were excluded as they presented a high current ratio, which would compromise e the application of the DEA approach. See below the descriptive tables of the sample:

<div align="center">Table 1 – Descriptive statistics of the sample</div>

	Lines	Average Fleet	Numbers of Departures	Total Assets	Shareholders' Equity	Total Passengers Carried
Max	196	1724	9,924,058.9	576,534,150.91	317,147,668.97	434,237,090
Min	4	44	108,809.1	679,252.00	30,291,950.00	12,368,808
Mean	55,103	535.9	2,345,259.9	104,175,980.02	46,098,202.41	115,520,102.31
Standard Deviation	49,778	440.8	2,253,856.1	140,853,363.99	79,731,506.84	95,863,486.71
	Total Kilometers Driven	Total Revenue (R$)	Net Income	Current Ratio	Return on Assets (ROA)	Expenses per vehicle
Max	4,295,693	577,621,198,00	53,889,388,00	14.1	0.1162	5,137.26
Min	127,785	23,815,410,00	.6,330,925,00	0.26	-0.1602	101.47
Mean	1,273,537	189,865,239,75	6,961,285,2	2.206	0.0095	1549.83
Standard Deviation	1,091,040	174,288,466,83	12,391,502,8	3.364	0.0609	1,062.95

Results

Operational Efficiency – Input-oriented DEA-BCC model

As presented previously, the variables representing average fleet, administrative expenses per vehicle and numbers of departures were used as inputs, while the variables of passengers carried and kilometers driven, all of 2011, were used as outputs. The following statistical data were obtained:

Table 2 – Statistical data of the input-oriented BCC model for operational efficiency

	Total Lines	Average Fleet	Numbers of Departures	Expenses per vehicle	Passengers carried	Kilometers driven
Max	196	1724	9,924,059	5,137,26	434,237,090	4,295,693
Min	9	79	204,534,7	110,54	14,340,508	143,826
Mean	58.62963	569.1111	2,498,328	1,623,784	122,343,125	1,350,241
Standard Deviation	49.80194	438.8197	2,261,477	1,057,952	95,846,115,6	1,091,940

Hence the following scores were obtained after applying the model with the help of the DEA-Solver program:

Table 3 – Ranking with scores of the DMUs in the input-oriented BCC model for operational efficiency:

Ranking	Company	Score
1	CA33CA64CA74	1
1	CA11	1
1	PA12PA22PA41	1
1	PA12	1
1	PA81	1
1	CA31	1
1	CA33	1
1	PA31	1
1	CA41	1
1	CA42	1
1	CA81	1
1	PA51	1
1	CA61	1
1	CA62	1
1	CA63	1
1	CA73	1
1	PA62	1
1	CA71	1
1	CA72	1
20	CA11CA83	0,985252
21	CA82	0,970035
22	PA82	0,952087
23	PA61	0,950174
24	CA12	0,942113

25	PA61PA71	0,914249
26	CA21	0,91095
27	CA51	0,882748

The DEA-Solver software generated the following graph that represents the results of each DMU, according to the ranking:
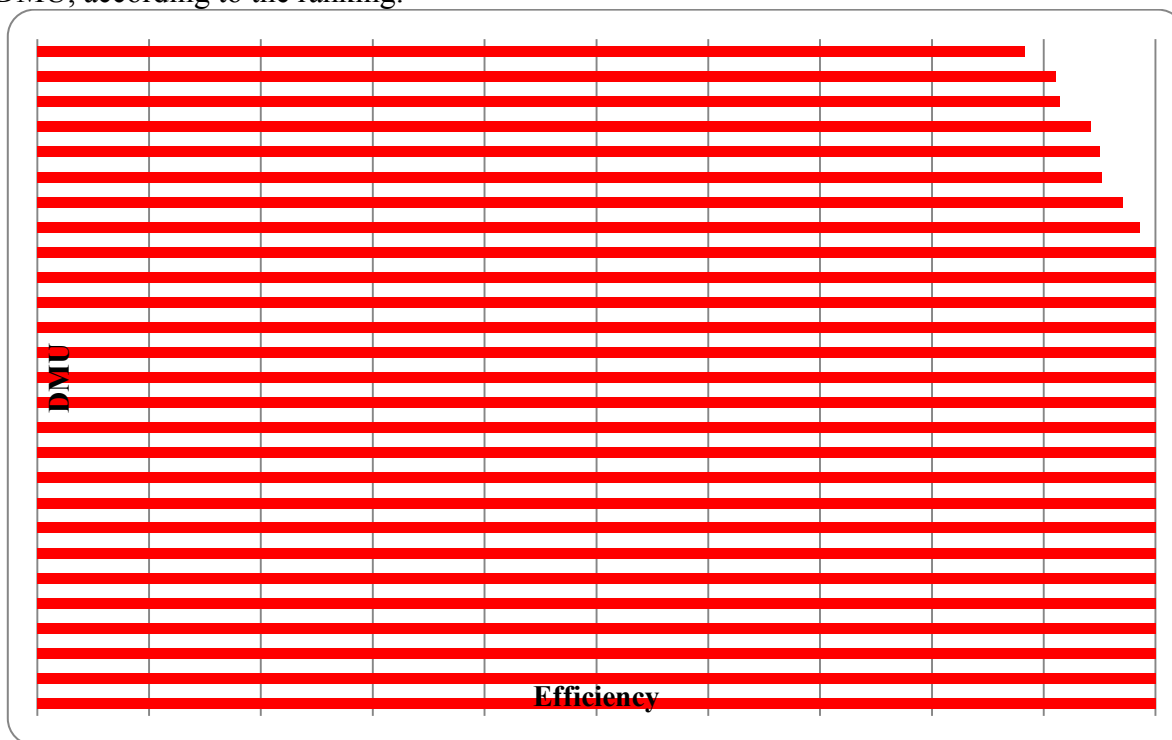
Figure 2 – Ranking of the DMUs by the input-oriented DEA-BCC model with operational variables

Operational Efficiency – output-oriented DEA-BCC models

The output-oriented BCC model was applied using the same data used to apply the input-oriented BCC model for operational efficiency, initially to ascertain whether there are significant changes in the ranking of the companies, using one model or the other. It is also possible to verify which would be the possible recommendations for a production increase, given the use of the available resources. Hence the following data was obtained:

Table 4 – Ranking with scores of the DMUs in the output-oriented BCC model for operational efficiency:

Ranking	DMU	Score
1	CA33CA64CA74	1
1	CA11	1
1	PA12PA22PA41	1
1	PA12	1
1	PA81	1
1	CA31	1
1	CA33	1
1	PA31	1

1	CA41	1
1	CA42	1
1	CA81	1
1	PA51	1
1	CA61	1
1	CA62	1
1	CA63	1
1	CA73	1
1	PA62	1
1	CA71	1
1	CA72	1
20	CA11CA83	0.984679
21	CA82	0.969348
22	PA82	0.947559
23	PA61	0.941871
24	CA12	0.941048
25	CA21	0.92466
26	PA61PA71	0.914567
27	CA51	0.896462

The following graphs representing the efficiency of each company were obtained through the output-oriented DEA BCC model with operational data, following the ranking:
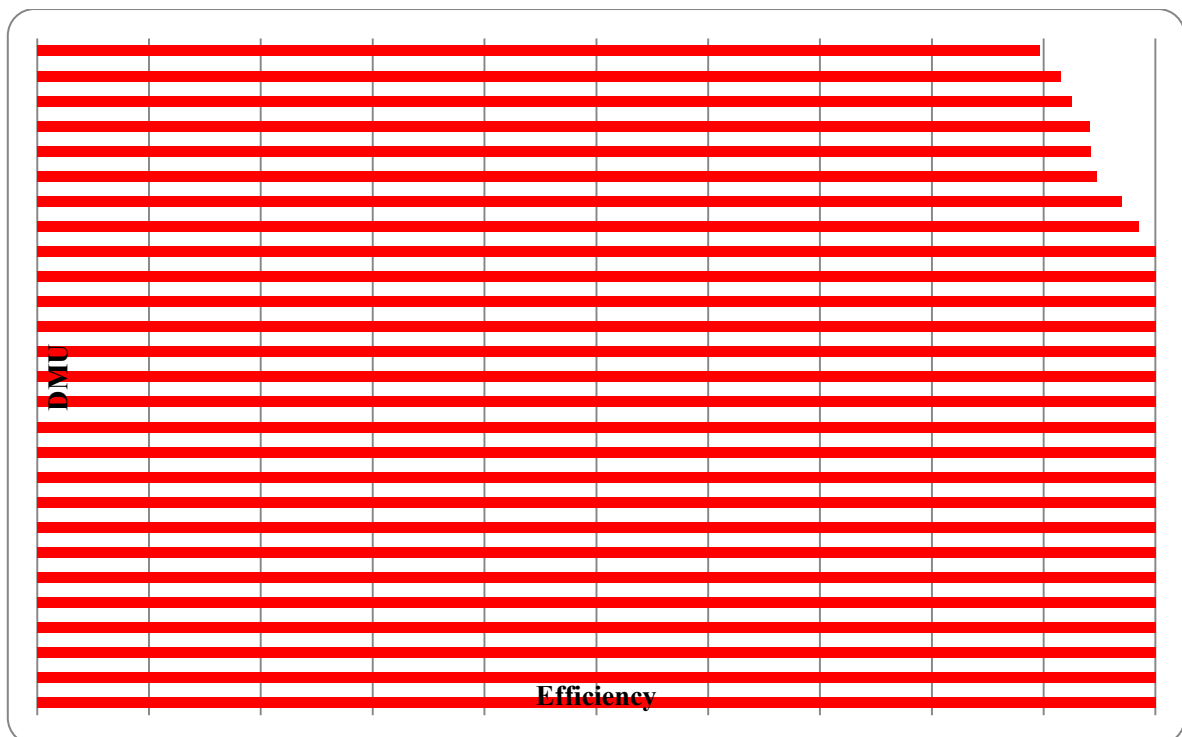
Figure 3 – Ranking of the DMUs by the output-oriented BCC model with operational variables

Note that regardless of the orientations used, there are no differences between efficient and inefficient companies, except with regard to the very close scores obtained (which suggests

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slight concavity in the efficient border design), as can be seen in the comparative graph below:

Chart 4: Comparative results of the input-oriented DEA-BCC x output-oriented DEA-BCC models

DMU	Score BCC-input	Ranking	DMU	Score BCC-output	Ranking
CA11	1	1	CA11	1	1
CA12	0.942113	24	CA12	0.941048	24
PA12	1	1	PA12	1	1
CA21	0.91095	26	CA21	0.92466	25
CA31	1	1	CA31	1	1
CA33	1	1	CA33	1	1
PA31	1	1	PA31	1	1
CA41	1	1	CA41	1	1
CA42	1	1	CA42	1	1
CA51	0.882748	27	CA51	0.896462	27
PA51	1	1	PA51	1	1
CA61	1	1	CA61	1	1
CA62	1	1	CA62	1	1
CA63	1	1	CA63	1	1
PA61	0.950174	23	PA61	0.941871	23
PA62	1	1	PA62	1	1
CA71	1	1	CA71	1	1
CA72	1	1	CA72	1	1
CA73	1	1	CA73	1	1
CA81	1	1	CA81	1	1
CA82	0.970035	21	CA82	0.969348	21
PA81	1	1	PA81	1	1
PA82	0.952087	22	PA82	0.947559	22
PA12PA22PA41	1	1	PA12PA22PA41	1	1
CA33CA64CA74	1	1	CA33CA64CA74	1	1
PA61PA71	0.914249	25	PA61PA71	0.914567	26
CA11CA83	0.985252	20	CA11CA83	0.984679	20

Financial Efficiency – Input-oriented DEA-BCC models

According to Chart 6, the variables of 2011 that represent Total Assets, Shareholders' Equity, Expenses per Vehicle, Net Revenue, Net Income, Current Ratio and Return on Assets were used and presented the following statistical data:

Table 5 – Statistical Data of the input-oriented BCC model for financial efficiency

	Total Assets	Shareholders' Equity	Expenses by vehicle	Net Revenue	Net Income	Current Ratio	Return on Assets
Maximum	576,534,150.91	317,147,668.97	5,137.26	577,621,198.09	35,254,779.00	4.36	0.1162
Minimum	8,657,779.83	-30,291,950.00	110.54	23,815,410.32	-9,212,000.00	0.26	-0.0887

| Mean | 111,842,404.31 | 49,422,887.33 | 1,623.78 | 201,792,716.77 | 2,167,744.14 | 1.33 | 0.0220 |
| Standard deviation | 143,028,149.16 | 81,656,195.57 | 1,057.95 | 174,824,884.58 | 7,535,220.24 | 0.95 | 0.0412 |

The following score was obtained based on these variables:

Table 6 – Ranking with scores of the DMUs in the input-oriented DEA-BCC model for financial efficiency:

Rating	Company	Score
1	CA33CA64CA74	1
1	PA12PA22PA41	1
1	PA82	1
1	PA12	1
1	CA21	1
1	CA31	1
1	CA33	1
1	PA31	1
1	CA41	1
1	PA81	1
1	CA81	1
1	PA51	1
1	CA73	1
1	CA72	1
1	PA62	1
16	CA11CA83	0.897268
16	CA11	0.897268
18	CA61	0.857669
19	PA61	0.837287
19	PA61PA71	0.837287
21	CA63	0.828381
22	CA62	0.703622
23	CA12	0.607994
24	CA82	0.361204
25	CA42	0.342614
26	CA71	0.304087
27	CA51	0.23675

The *DEA-Solver* software generated the following graph that represents the results of each DMU:
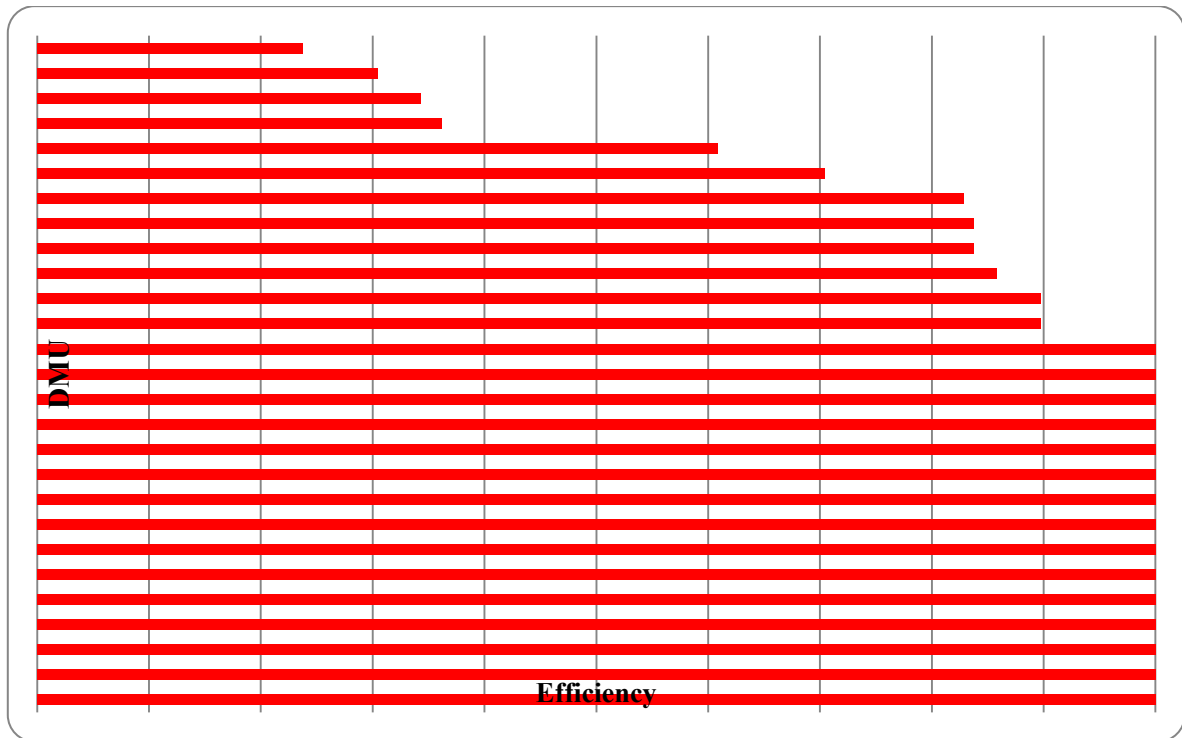
Figure 4 – Rating of the DMUs by the input-oriented DEA-BCC model with financial variables

Financial Efficiency – output-oriented DEA-BCC model
Employing the same data used to apply the input-oriented BCC model for financial efficiency, the output-oriented BCC model was initially applied to verify whether there are significant changes in the ranking of the financially efficient companies, using one model or the other. It is also possible to verify which the possible recommendations for an increase in the financial variables would be, given the current level of inputs used.

Hence the following data was obtained:

Table 7 - Ranking with scores of the DMUs in the output-oriented BCC model for financial efficiency.

Rating	Company	Score
1	CA33CA64CA74	1
1	PA12PA22PA41	1
1	PA82	1
1	PA12	1
1	CA21	1
1	CA31	1
1	CA33	1
1	PA31	1
1	CA41	1
1	PA81	1
1	CA81	1
1	PA51	1
1	CA73	1
1	CA72	1

1	PA62	1
16	CA11CA83	0.901942
16	CA11	0.901942
18	CA61	0.778793
19	CA63	0.716835
20	CA62	0.70055
21	CA51	0.656232
22	CA12	0.568076
23	PA61	0.559612
23	PA61PA71	0.559612
25	CA42	0.430104
26	CA82	0.427164
27	CA71	0.345622

With the above results, the following graphs representing the efficiency of each company were obtained through the output-oriented DEA-BCC model with financial data:
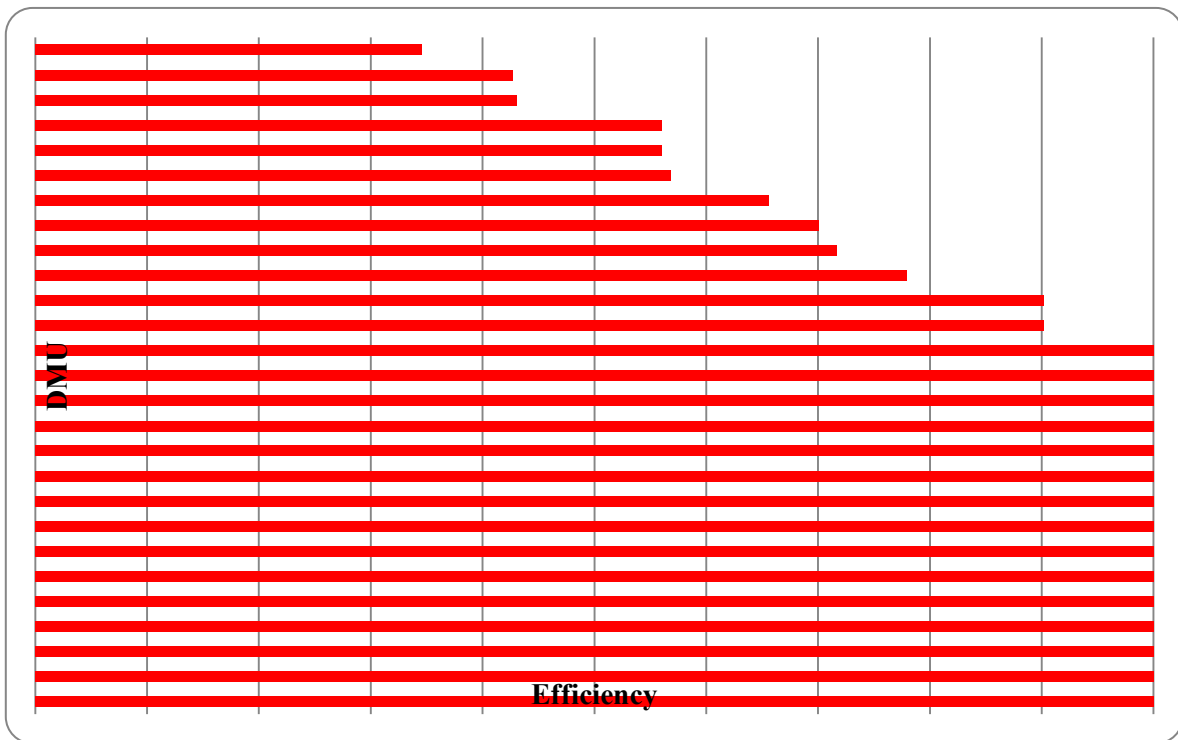
Figure 5 – Rating of DMUs by the output-oriented BCC model with financial variables

Clearly, regardless of the orientations used, there are no differences in the identification of efficient and inefficient companies, except in relation to the scores obtained (which suggests concavity in the efficient border design), as can be seen in the comparative graph below:

Chart 5 – Comparison between the results of the input-oriented DEA-BCC x output-oriented DEA-BCC models– financial variables

DMU	Score BCC-input	Rating	DMU	Score BCC-output	Rating
CA11	0.897268	16	CA11	0.901942	16

CA12	0.607994	23	CA12	0.568076	22
PA12	1	1	PA12	1	1
CA21	1	1	CA21	1	1
CA31	1	1	CA31	1	1
CA33	1	1	CA33	1	1
PA31	1	1	PA31	1	1
CA41	1	1	CA41	1	1
CA42	0.342614	25	CA42	0.430104	25
CA51	0.23675	27	CA51	0.656232	21
PA51	1	1	PA51	1	1
CA61	0.857669	18	CA61	0.778793	18
CA62	0.703622	22	CA62	0.70055	20
CA63	0.828381	21	CA63	0.716835	19
PA61	0.837287	19	PA61	0.559612	23
PA62	1	1	PA62	1	1
CA71	0.304087	26	CA71	0.345622	27
CA72	1	1	CA72	1	1
CA73	1	1	CA73	1	1
CA81	1	1	CA81	1	1
CA82	0.361204	24	CA82	0.427164	26
PA81	1	1	PA81	1	1
PA82	1	1	PA82	1	1
PA12PA22PA41 CA33CA64CA74	1 1	1 1	PA12PA22PA41 CA33CA64CA74	1 1	1 1
PA61PA71	0.837287	19	PA61PA71	0.559612	23
CA11CA83	0.897268	16	CA11CA83	0.901942	16

Analysis and verification of the operational efficiency and financial efficiency scores

Once the results are obtained in the DEA-BCC models, with both orientations and for the operational and financial data, these will reveal whether financial efficiency explains operational efficiency. For this purpose, Pearson's Correlation was used to measure the degree of correlation between the two results: operational and financial. Thus we compared the scores obtained by the input-oriented DEA-BCC models, with the following result:

Chart 6 – Comparison between the scores generated by the input-oriented DEA-BCC models–
Operational and Financial

Company	Operational Efficiency Score	Rating	Company	Financial Efficiency Score	Rating
CA11	1	1	CA11	0.897267702	16
CA12	0.942112547	24	CA12	0.607993957	23
PA12	1	1	PA12	1	1
CA21	0.910949746	26	CA21	1	1
CA31	1	1	CA31	1	1

CA33	1	1	CA33	1	1
PA31	1	1	PA31	1	1
CA41	1	1	CA41	1	1
CA42	1	1	CA42	0,342614481	25
CA51	0.882748117	27	CA51	0.236750433	27
PA51	1	1	PA51	1	1
CA61	1	1	CA61	0.857669312	18
CA62	1	1	CA62	0.703621501	22
CA63	1	1	CA63	0.82838093	21
PA61	0.95017413	23	PA61	0.837287119	19
PA62	1	1	PA62	1	1
CA71	1	1	CA71	0.304086754	26
CA72	1	1	CA72	1	1
CA73	1	1	CA73	1	1
CA81	1	1	CA81	1	1
CA82	0.970034805	21	CA82	0.361204058	24
PA81	1	1	PA81	1	1
PA82	0.952086844	22	PA82	1	1
PA12PA22PA41	1	1	PA12PA22PA41	1	1
CA33CA64CA74	1	1	CA33CA64CA74	1	1
PA61PA71	0.914249356	25	PA61PA71	0.837287119	19
CA11CA83	0.985251767	20	CA11CA83	0.897267702	16

Correlation between the scores = 0.355211439
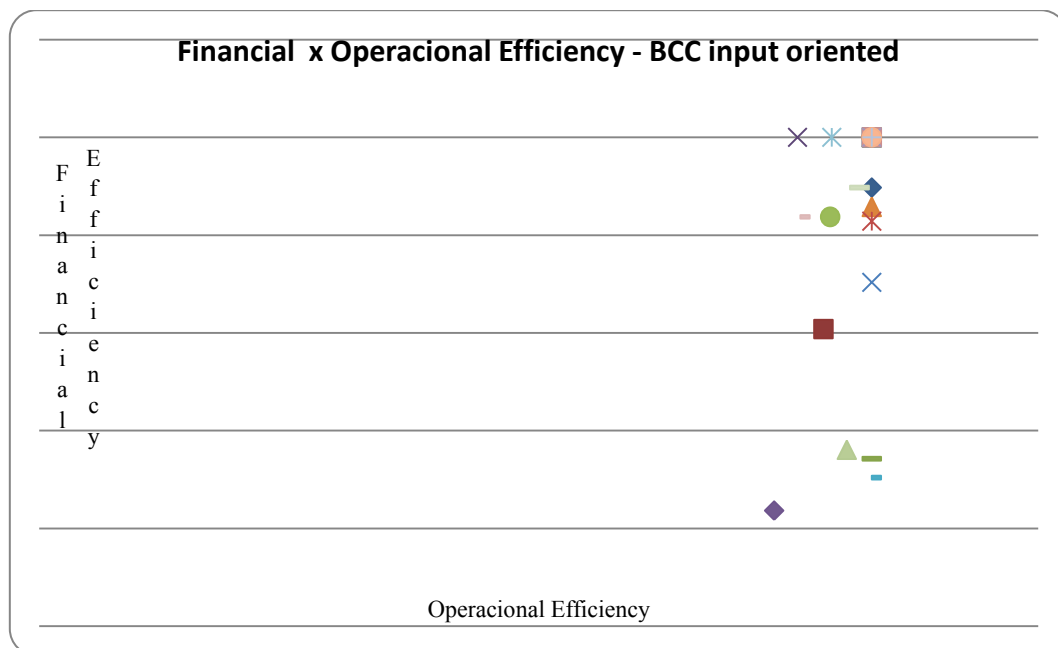
Figure 6 – Dispersion between the operational efficiency and financial efficiency results using the input-oriented DEA-BCC model.

The horizontal axis represents operational efficiency, and it can be seen that the companies analyzed by the DEA-BCC model are very close to the efficiency border. However, greater

dispersion can be observed when compared with the y-axis, which represents financial efficiency. Therefore, we verified that operationally efficient companies can become financially inefficient as is the case of CA11, CA42, CA61, CA62, CA63, CA71 and PA12PA22PA41.

It was also observed that companies which are not operationally efficient achieved financial efficiency, as is the case of the companies CA21 and PA82. It can be deduced that it is possible for an operationally efficient company to be financially inefficient rather than an operational inefficient company be financially efficiently, showing that operational efficiency explains financial efficiency more than the opposite.

Once the scores of the output-oriented DEA-BCC model were obtained, the operational and financial results were compared once again:

Chart 7 – Comparison between the scores generated by the output-oriented DEA-BCC models – Operational and Financial

Companies	Operational Efficiency Score	Rating	Companies	Financial Efficiency Score	Rating
CA11	1	1	CA11	0.901941629	16
CA12	0.941047588	24	CA12	0.568076191	22
PA12	1	1	PA12	1	1
CA21	0.924660143	25	CA21	1	1
CA31	1	1	CA31	1	1
CA33	1	1	CA33	1	1
PA31	1	1	PA31	1	1
CA41	1	1	CA41	1	1
CA42	1	1	CA42	0.430104229	25
CA51	0.896461537	27	CA51	0.656232265	21
PA51	1	1	PA51	1	1
CA61	1	1	CA61	0.778792512	18
CA62	1	1	CA62	0.70055032	20
CA63	1	1	CA63	0.716834844	19
PA61	0.941870911	23	PA61	0.559611637	23
PA62	1	1	PA62	1	1
CA71	1	1	CA71	0.345621816	27
CA72	1	1	CA72	1	1
CA73	1	1	CA73	1	1
CA81	1	1	CA81	1	1
CA82	0.96934838	21	CA82	0.427164382	26
PA81	1	1	PA81	1	1
PA82	0.947559379	22	PA82	1	1
PA12PA22PA41	1	1	PA12PA22PA41	1	1
CA33CA64CA74	1	1	CA33CA64CA74	1	1
PA61PA71	0.914567454	26	PA61PA71	0.559611637	23
CA11CA83	0.984679258	20	CA11CA83	0.901941629	16

Correlation between the scores = 0.352655329
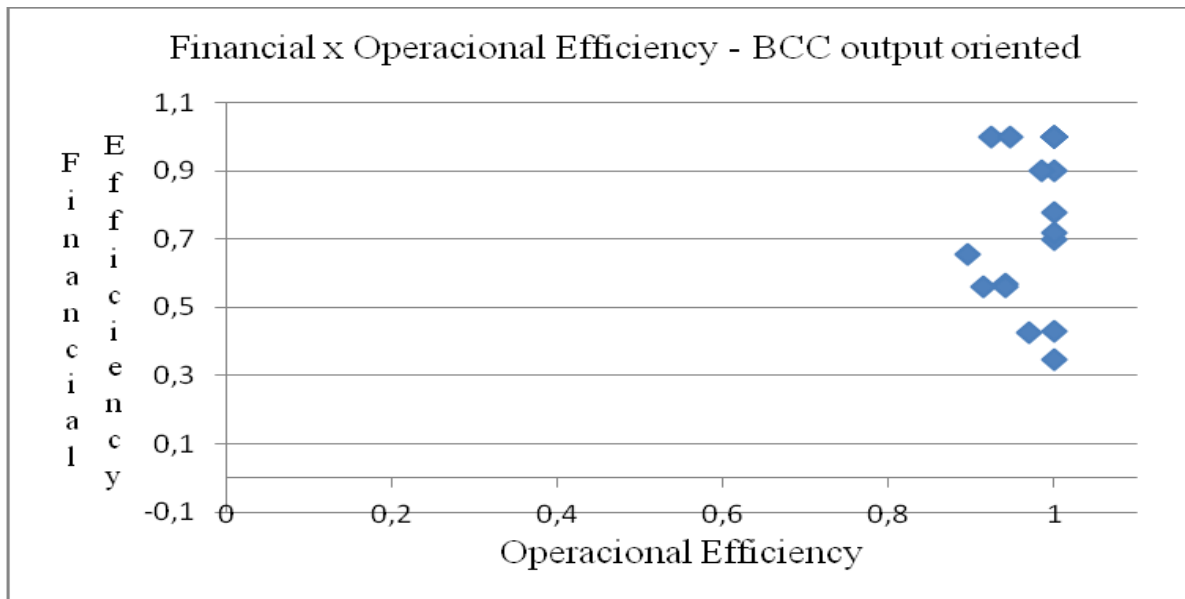
Figure 7 – Comparison between the scores generated by the output-oriented DEA-BCC models – Operational and Financial

In this dispersion between the output-oriented BCC models for both efficiencies, it can once again be seen that the x-axis, which represents operational efficiency, concentrates all the DMUs close to the value 1 (when not 1 itself), indicating homogeneous operational efficiency in the industry. However, as in the previous model, note that there is ample distribution in financial efficiency, represented by the y-axis.

Once the pairs of information (operational score x financial score) referring to each company have been plotted, a point cloud is obtained that is defined by x and y coordinates. This cloud, in turn, should define an axis or direction that would characterize a pattern of relationship between x and y. The regression will be linear if a trend or axis is observed in the Cartesian point-cloud.

In the Scatter Diagrams above (Figures 13 and 14), note that there is no explanatory relation between the variables. The diagrams do not indicate that the y-values vary in relation to that of x, i.e., operational efficiency does not explain financial efficiency. The ratio is not representative (0.35), within a scale of -1 to +1.

Final considerations

The DEA models proposed for comparative performance appraisal provide, with the available variables, a distinct view between operationally efficient and financially efficient companies. The results of the application undoubtedly allow us to conclude that financial efficiency and operational efficiency are not incompatible. The good use of resources in the operational process and good financial results were found in many bus companies. However, it was also confirmed that some operationally efficient companies did not present good financial results, providing an opportunity for further research with the intention of identifying possible agency problems. Results were also obtained with operationally inefficient, yet financially efficient companies, suggesting that one type of efficiency does not determine the other.

In this study, it is apparent that public bus passenger transportation companies in the city of São Paulo operate relatively very close to the efficiency border, without major distortions. Much of this operational homogeneity can perhaps be explained by the regulatory actions of

the managing body of the city, as well as the vast experience of many of its owners, traditional players of the transportation industry.

We must bear in mind that the bus operating companies from the city of São Paulo were selected through a bidding process for the concession or permission of their public transportation services and, when they do not prove efficient, have high efficiency scores, i.e., close to the efficient border. Bidding processes force operating companies to adopt cost reduction and service quality improvement strategies, including efficiency measures for performance appraisal, with the transfer of these gains to society. Therefore, it is suggested that the management bodies use efficiency evaluations as instruments for monitoring and encouraging operator performance, using the DEA for this purpose.

One of the potentials of the Data Envelopment Analysis is to indicate, to the companies that have proven inefficient, which efficient firms should serve as a reference. The consistency of this technique can be seen in this study as it indicated small companies (in Total Assets or fleet) as a reference for other even larger companies.

The study presents some limitations that can impair the generalization of results. Firstly, the sampling and data gathering process implies caution in the evaluation of the hypothesis. Although 27 DMUs have been analyzed by the model, another 10 needed to be excluded as they failed to present individual financial statements, besides another two that presented outliers. Some important variables, such as Value Added or the separation of expenses into operating and administrative could contribute a great deal to the model, especially in the definition of targets for the inefficient companies. However, given the methods of presentation of the financial statements, some variables presented missing values, and were wisely excluded so as not to jeopardize the DEA model.

In adopting two different types of efficiency (operational and financial), steering them both towards the input and the output, it can be observed that there is a moderate correlation between these efficiencies. In other words, many companies considered efficient in the operational scope were also efficient in the financial scope. Owing to the considerable variation existing in the size and in the characteristics of the companies, the hypothesis of constant returns to scale would be inappropriate, which justifies the option for the models of variable returns.

For future studies within the public transportation system, there is a range of possibilities that could be listed as follows:

- From the strategic viewpoint, there is the possibility of the company, or of the managing body, analyzing the bus lines considering each one of them as a DMU, with inputs consumed and outputs generated between these, which would allow the identification of efficient and inefficient lines. The company would be able to seek new strategies and innovation to improve inefficient lines while the transportation managing body would be able to seek compensation mechanisms for the companies operating these lines.

- In the managerial aspect, the application of the DEA approach can distinguish between efficient and inefficient managements, but providing the managed units are homogeneous. Hence the change of command in companies would be a cutoff point for the model to be applied before and after the managerial change, identifying pre- and post-change efficiencies.

- Other variables of interest to the population, such as level of satisfaction, complaints, waiting time, comfort and cleanliness could be used to compose the efficiency of that company, and would be able to encourage the managing body to propose performance-based flexible remuneration.

- Finally, using a more advanced approach in DEA, it is possible to identify technological and/or innovation impacts on the efficiencies of companies. A case open to study is the kind of impact on the efficiency of companies with the implementation of electronic fare collection cards (Unified Ticket). Or alternatively, how efficient companies

have become with the implementation of AVLs (Automatic Vehicle Location), a system that helps bus transportation logistics with information such as geographical location of the vehicle in operation, average speed in each segment and at any time, and others.

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Ram Herstein

Yoram Mitki

Ron Berger

Cities for Sale: How Cities Can Attract Tourists by Creating Events

Abstract:
City mayors and decision-makers work hard to meet the strategic challenge of branding their cities in order to attract tourists. Despite the vast amount of research invested in this area, in practice the idea of branding cities to gain more tourist volume still seems to be an enigmatic process. Many researchers have focused on large-scale festivals mainly sport events as ways to draw tourists, and ignored small scale events for small cities. The purpose of this paper is twofold. First, it presents a new framework that enables city planners and decision-makers to identify the correct positioning for their cities (large, medium and small) based on events and festivals in order to attract tourists. Second, the paper offers especially relevant strategies for implementing the branding process based on events and festivals in practice and becoming a tourist mecca. These strategies are events/festivals based on sports, famous people/characters, films and culture.

Tatana Hornychova

Localization Factors of FDI Improving Socioeconomic Development of Regions

Abstract:

This study analyses foreign direct investment (FDI) and its key role in socioeconomic development of an area. This paper presents a case study of inflow of FDI to different regions of the Czech Republic. The aim of this study is to create a set of recommendations for regional development policies, provided that this kind of investment brings stability and prosperity to any region of a country. The study concentrates on French and Belgian investors in order to determine the key factors that influence the localization of FDI coming from France and Belgium to regional economies of the Czech Republic. In the first part, theoretical data concerning this topic is introduced, followed by analysis of the investment inflow from France and Belgium that is supported by the agency CzechInvest. Then different regions of the country are examined to select localization factors with a great influence on French and Belgian investors when choosing the area to invest in. They are: preference of industries having tradition in the regions, industrial proximity of companies and quality and quantity of transport infrastructure. The final part is dedicated to recommendation on how to adapt regional development policies accordingly.

Ashraf Ismail

Strategic Options Trading in Equity Markets

Abstract:

I present a model of strategic options trading in equity markets that captures the interaction between an equity trader and a market maker. The market maker offers the equity trader a call or put option whose value is dependent upon a set of exogenous price vectors. The equity trader can then use backwards induction to derive their optimal trading rule, which must satisfy the conditions of a Nash Equilibrium. This approach clarifies and restricts the meaning of an \"options strategy\" by requiring optimal trading rules to abide by the principle of best response. The resulting strategic theory of options may provide a novel way to integrate equity trading and game theory; two disciplines that until now have remained largely distinct.

Emilie Jašová

Božena Kadeřábková

Methods for estimating the NAIRU captures the unstable labor market environment in Visegrad Group countries, the sources of instability and an estimate of changes in the near future

Abstract:

The natural rate of unemployment is the indicator explaining the labour market behavior and the relationship between unemployment rate and inflation. The concept of natural rate of unemployment which indicates a level of unemployment at which the inflation rate is constant is called Non-Accelerating Inflation Rate of Unemployment (NAIRU). The unobservable NAIRU we quantified with using Kalman filter, HP filter, Break model and One-equation model. The problems on the instable labour market are the best described by the Kalman filter and the HP filter. Sources of instability and eventual changes in labour market can include the restructuring of th e economy, change in factors exogenous to the labour market (exchange rate, oil price and import prices) or by the global financial and economic crisis. The instability of economic enviroment is represented by negative values of NAIRU. Findings about non stable enviroment in past can be used to the support of hypothesis about the labour market at the end of the examined period. Kalman filter can be used also for testing of time leading between labour market development in various countries and for short term prediction making. HP filter results support the results from Kalman filter.

Janez Justin

Maja Zupancic

Pupils' knowledge of ecosystems under stress – findings from an international research project

Abstract:

Due to deterioration of our environments school systems are expected to answer the need of greater provision of environmental education for young generations. To what extent do national school systems on the planet answer this need? We provide some information on this issue, presenting data gathered in a large-scale comparative study of educational achievement, the TIMSS project (Trends in International Mathematics and Science Study), conducted by The International Association for the Evaluation of Educational Achievement (IEA). Thirteen years old pupils from 60 countries participated in the project. Samples in each country were large and representative. One part of the project was intended to provide information on pupils´ achievement in science (chemistry, biology, physics, earth science). Sixteen tasks for pupils in this part of the project were designed in such a way as to measure their understanding of environmental problems. We compared average scores pupils from the participating countries obtained on national level when doing these tasks. In this way we identified countries with good and not so good pupils´ understanding of environmental problems. Then the question is raised: Does the inclusion of environmental issues in national curricula correlate with pupils´ understanding of environmental issues? The data gathered in TIMSS 2007 as well as those from TIMSS 2011 are being used in order to provide a provisional answer to this question (the date for the TIMSS 2011 data release is December 11, 2012). In addition to the presentation of the data a more general issue is touched upon. What effect does large-scale international research into educational achievement (like TIMSS or OECD-PISA study) have on national curricula, or more specifically, on the part of national curricula that determines the goals and content of environmental education? As a matter of fact, countries report on a considerable impact these studies have on national curricula. Can we speak of globalization of school knowledge in this specific area? And more importantly, does potential globalization of school knowledge in this specific area bring about a diminution of the role that local, traditional or indigenous knowledge has in pupils´ understanding and their awareness of environmental problems. Some tentative answers to these questions are formulated.

Sami Kajalo

Arto Lindblom

Consumers' Preferences on Formal and Informal Surveillance Practices in the Context of Shopping Centers

Abstract:

The present study investigates consumers preferences on formal and informal surveillance practices in shopping centers, and how consumers can be grouped by their preferences as far as their sense of security is considered. In addition, this study examines consumer groups attitudes towards different aspects of patronage behavior. The theoretical framework is based on Crime Prevention through Environmental Design (CPTED) which has been modified for shopping centers. The empirical data was collected in 2010 from 200 shopping center visitors in St. Petersburg, Russia. First, principal component analysis was used to examine consumers preferred surveillance practices in the context of shopping centers. Five factors were found: Clean and well-lit premises, Well-designed parking, Surveillance technology, Sales personnel and Hard crime protection. Second, based on the results of the factor analysis, consumers were grouped into four groups using cluster analysis: Sense of security based on formal surveillance, Sense of security based on architectural design, Sense of security based on well-designed parking, and Sense of security based on personnel and hard crime protection. Third, this study showed that the consumer groups that were identified differ in many aspects of patronage behavior. However, consumer groups do not differ in two aspects.

Jeffrey Kantor

Zeev Shtudiner

Support for Socio-Economic Change: the Impact of Risk Aversion and a Focus on the Present

Abstract:
A wave of rallies, demonstrations and protests took place in Israel in the summer of 2011. An increase in the price of a staple product-cottage cheese-was the trigger that got a few individuals to use social networks including facebook in order to motivate and pressure people to do something. At the beginning the focus was on the poor.

Selma Kara

The Relationship Between Text Comprehension and Second Language Vocabulary Acquisition: Word-focused Tasks

Abstract:

There have been major influential views on the learning of L2 vocabulary through reading. One approach promotes explicit vocabulary learning through vocabulary activities. However, it is not clear whether there is an effect of text comprehension on vocabulary learning when reading and doing exercises for vocabulary learning. The present study was designed to investigate the relationship between text comprehension and learning vocabulary through word-focused activities. The participants were 100 first year students. They were given a vocabulary checklist before the treatments to make it sure that all participants were unfamiliar with the target words. There were four groups and all groups read one text each week during eight weeks. Each text contained one target word which appeared six times in the text. The treatment group read the texts, answered the comprehension questions and they completed the vocabulary activities. Then, they answered the form-recognition and meaning recognition tests as the last step of the process. On the ninth week, and tenth week, the participants were given the delayed post-tests to investigate whether they are familiar with the target words after treatments. First, participants´ answers to comprehension questions were analyzed. Then, means were calculated for form recognition and meaning-recognition tests. Comprehension and vocabulary learning were compared for treatment and control groups. The analyses showed that the treatments have an effect on learner scores and results when learning an unknown word. One of the aims of the study was to explore the effect of completing a variety of vocabulary exercises while reading. It seemed to have tapped different levels of processing capabilities such as recognition and interpretation. The analysis showed that there is not a significant correlation between vocabulary learning through word-focused activities and text comprehension. It is concluded that to learn vocabulary through reading, text comprehension is a necessary condition.

Dong-No Kim

Underdevelopment of Citizenship in East Asia

Abstract:

Underdevelopment of Citizenship in East Asia Dong-No Kim Department of Sociology Yonsei University This paper purports to investigate how and why the concepts of citizen and citizenship are underdeveloped in East Asian countries, especially when compared to the West. Ever since individuals tried to form the collectivity, we can find two different types of it: the state and civil society. Accordingly, an individual has dual political identities

Jungju Kim

Jee-Hyeong Park

Comparative Advantage and Heterogeneous Firms: Revisited with FDI

Abstract:

This paper extends the model of Bernard et. al (2007) by allowing home firms to engage in FDI either to serve the foreign market or to serve the home market whenever such FDI improves their profitability. FDI possibility generates new results with regard to the pattern of specialization and the effect of freer trade on average industry productivities, some of which contrast to those of Bernard et. al (2007). FDI raises the likelihood of complete specialization in terms of nationality of firms. With FDI possibility, some of home firms in an expanding industry will engage in FDI, shifting its hiring from home to foreign factors of production, which creates downward pressure on the relative return to the factor that gets more abundant in the home country but creates upward pressure on the relative return to the factor that gets scarcer in the foreign country. This helps local firms in an expanding industry but hurts local firms in a shrinking industry, inducing complete specialization under less extreme factor abundances with FDI than without it. In contrast to Bernard et. al (2007), complete specialization occurs only in terms of nationality of firms: foreign FDI firms produce in the home country even after all home firms driven out in a comparative disadvantaged industry. In the presence of FDI, a reduction in trade costs may reduce the average productivity of a comparative disadvantaged industry, contrasting to the analysis of Bernard et. al (2007) in which freer trade always raises average productivities of all industries. A reduction in trade costs promotes conversion of FDI firms into exporting firms in all industries of all countries. Consider the case in which the degree of specialization is high so that a small number of home firms compete with a large number of foreign FDI firms in a comparative disadvantaged industry of the home country. Then, the layoff of home production factors by foreign FDI firms converting into exporting firms can dominate the hiring of home production factors by home FDI firms converting into exporting firms, creating an environment in which less productive home firms can survive in a comparative disadvantaged industry.

1. INTRODUCTION

By incorporating firm heterogeneity of Melitz (2003) into the trade model of monopolistic competition and comparative advantage of Helpman and Krugman (1985), Bernard, Redding and Schott (2007) demonstrate that trade-generated relocation of resources toward more productive firms will be more extensive in a sector with comparative advantage, magnifying ex ante comparative advantage, which in turn creates additional gains from trade. While this important extension of heterogeneous-firm model of trade indentifies a route through which comparative advantage being strengthened by firm heterogeneity, it ignores the possibility of firms' engaging in FDI (Foreign Direct Investment) that can replace their exports and sometimes may even replace their domestic production. Given the increasing importance of FDI, especially between South and North, it is only natural to consider the extension of this recent trade model by introducing the possibility of FDI.

This paper extends the model of Bernard et. al (2007) by allowing domestic firms to engage in FDI either to serve the foreign market or to serve the domestic market whenever such FDI improves their profitability. Introduction of FDI possibility generates results that contrast to those of Bernard et. al (2007). Allowing FDI deteriorates ex ante comparative advantage rather than magnifying it. This is because comparative disadvantage sectors benefit more from FDI than comparative advantage sectors do, reducing the difference of wages of different types of labor across countries (the source of comparative advantage). Furthermore, the aggregate productivity gains associated with trade liberalization, a very common and important feature of trade models with firm heterogeneity, may not necessarily arise in our model. When trade costs fall, potential benefits from engaging FDI instead of serving the foreign market by exporting can get smaller, leading to less FDI. Reduction in FDI by foreign firms in a market implies less demand for both fixed and variable inputs associated with such FDI. While there will be an increase in demand for both fixed and variable inputs by exporting domestic firms, the reduction in demand for production factors caused by reduction in FDI may dominate this latter force, driving down the cost of production in the market. This reduction in the competition for the production factors that may accompany a fall in trade costs may enable less competitive firms to survive, reducing the aggregate productivity as a result.

To obtain above results, this paper uses the simulation method as well as mathematical derivation due to the complexity of the model: solving our model requires solving many nonlinear equations simultaneously. After full exploration of our model's theoretical implications through both mathematical and numeral analysis, we will do empirical testing of our model's predictions using Korean trade and FDI data.

2. MODEL

In this chapter, we develop the theoretical model which we use to answer for several questions in paper. Following BRS, we consider a world of two countries, two industries, two factors, and a continuum of heterogeneous firms. We make the standard Heckscher-Ohlin assumption that countries are identical in terms of preferences and technologies but differ in terms of factor endowments. Factors of production can move between industries but not across countries. We use H to index the skill-abundant home country and F to index the skill-scarce foreign country, so that $\qquad$ **,** where the bars indicate country endowments.

2.1 Consumption

The representative consumer's utility takes the Cobb-Douglas form,

$$\tag{1}$$

where, to simplify notation, we omit the country superscript except where important.

$\quad$ is a consumption index defined over consumption of individual varieties, $\qquad$, with dual price index, $\quad$, defined over prices of varieties, $\qquad$,

$$\underline{\qquad} \qquad \overline{\qquad} \tag{2}$$

where $\overline{\qquad}$ is the constant elasticity of substitution across varieties. For simplicity, we assume that the elasticity of substitution between varieties is the same in the two industries.

2.2 Production

Production involves a fixed and variable cost each period. Both fixed and variable costs use skilled and unskilled labor whose intensity of use varies across industries. All firms has the same fixed overhead cost, but variable cost varies with firm productivity, ⁣⁣⁣ . For simplification, we assume that the cost function takes the Cobb-Douglas form,

$$\qquad \qquad - \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad (3)$$

where ⁣ is the skilled wage and ⁣ is the unskilled wage, and industry 1 is assumed to be skill intensive relative to industry 2.

2.3 Autarky

In autarky economy, firms' profit maximization implies the equilibrium price equal to a constant mark-up over marginal cost:

$$\qquad \qquad \overline{\qquad \qquad} \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad (4)$$

With the equilibrium pricing rule, firm's revenue is proportional to productivity:

$$\qquad \qquad \qquad \overline{\qquad \qquad} \qquad \qquad \qquad \qquad \qquad (5)$$

And firm profits equal to revenue scaled by the elasticity of substitution minus fixed costs of production:

$$\qquad \qquad \overline{\qquad} \qquad \qquad \qquad \qquad \qquad \qquad \qquad (6)$$

We also assume there is a fixed entry cost which firms must pay to produce in an industry. The entry cost uses skilled and unskilled labor and we assume that the factor intensity of entry and production are the same, so that the industry sunk entry cost takes the form

$$\qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad (7)$$

After entry, firms draw their productivity, ⁣ , from a distribution, ⁣ , which is assumed to be common across industries and countries. Firms then face an exogenous probability of death each period, delta, which is out of manager's control.

A firm drawing productivity   produces in an industry if its profit is not negative,   .
This defines a zero-profit productivity cut-off (ZPC),   , in each industry, such that

$$ \tag{8} $$

Firms drawing productivity below   exit immediately, while those drawing productivity
equal or above   engage in profitable production. The value of entry is equal to 0 if it draws
a productivity below the ZPC and exit or is equal to the stream of future profits discounted by
the probability of death if it draws a higher enough productivity and produces:

$$ \overline{\qquad} \tag{9} $$

The ex post distribution of firm productivity,   , is conditional on successful entry and is
truncated at the ZPC;

$$ \overline{\qquad} \tag{10} $$

where   is the cumulative distribution function for   and   is the ex ante
probability of successful entry in an industry.

The expected value of entry is the ex ante probability of successful entry multiplied by the
expected profitability of producing until death and the free entry condition is

$$ \underline{\qquad\qquad} \tag{11} $$

where   is expected or average firm profitability from successful entry. Because equilibrium
revenue and profit are constant elasticity functions of productivity, average revenue and profit
are equal to the revenue and profit of a firm with weighted average productivity,
      and   , where weighted average productivity is determined by the ex post
productivity distribution and ZPC:

$$ \overline{\qquad} \tag{12} $$

With using equation (12) and some useful properties of the revenue function, we can re-write
the free entry condition as

$$\underline{\qquad} \quad \underline{\qquad} \qquad\qquad\qquad\qquad . \qquad\qquad\qquad\qquad (13)$$

Since the expected value of entry in equation (13) is monotonically decreasing in   , this relationship uniquely pins down the ZPC independent of factor rewards and other endogenous variables of the model. With this free entry condition, we can easily show that ZPC is increasing in fixed production costs and decreasing in the probability of firm death.

The steady-state equilibrium is characterized by a constant mass of firms entering an industry each period,   , and a constant mass of firms producing within the industry,   . It means that equation (14) must be hold.

$$(14)$$

The industry price indices are weighted averages of the prices of charged by firms with different productivities and we can write them as functions of mass of firms producing in economy multiplied by the price charged by the firm with weighted average productivity:

$$(15)$$

In equilibrium, we need the goods market to clear, which requires the share of a good in the value of production (in revenue) to equal the share of a good in expenditure:

$$(16)$$

Also, labor market clearing requires the demand for labor used in production and entry to equal labor supply:

$$\qquad\qquad ,$$

$$\qquad\qquad , \qquad\qquad\qquad\qquad (17)$$

where the superscript   refers to a factor used in production, and   refers to a factor used in entry.

2.4 Open Economy

Now, we consider the case where each country opens their market to other countries. So the firms can serve their own domestic market and foreign market. Furthermore, firms have two options in the way of entering foreign market, which are exporting or FDI(Foreign Direct Investment).

In this section, we introduce fixed and variable costs of trade as in Melitz (2003). To export a variety to a particular market, a firm must incur a fixed export cost (, which uses both skilled and unskilled labor with the same factor intensities as production. In addition, the firm may also face variable trade costs, which take the standard iceberg form, whereby a fraction units of a good must be shipped in industry in order for 1 unit to arrive. Due to these fixed and variable trade costs, some firms may choose not to export in equilibrium with depending on their productivity.

On the other hand, a firm chooses to serve foreign market via FDI, it bears additional fixed costs ( ) which are assumed to be sufficiently greater than . Also, if a firm chooses to access foreign market via affiliate production (FDI) instead of exporting, it can save transportation costs, variable trade costs, which are necessarily involved with exporting and may exploit the advantage of foreign cheaper labor than home labor.

With including these novel features, every firm decides whether to serve a foreign market, and whether to do so through exports or local subsidiary sales (FDI). These modes of market access have different relative costs: exporting involves lower fixed costs while FDI involves lower variables costs.

We show how these costs interact with comparative advantage to determine responses to trade liberalization that vary across firms, industries, and countries.

2.4.1 Consumption and production

Equilibrium prices are again a constant mark-up over marginal cost, so equilibrium prices in exports a constant multiple of domestic prices due to the variable trade cost:

$$\overline{} \qquad\qquad (18)$$

On the other hand, the equilibrium prices when a firm chooses FDI to access a foreign market is

$$\text{(19)}$$

If a firm serves foreign market via FDI, then it uses foreign labor for production. Although FDI production involves higher FDI fixed costs than fixed production costs, equilibrium prices depend on only marginal costs, so the prices of the goods which are produced by foreign affiliates of home firm equal to the prices of the goods produced by foreign firms with same productivities as home firms'.

Now, with using equation (5), we can show that equilibrium revenue in export market is proportional to that in the domestic market:

$$\text{(20)}$$

And equilibrium revenue of FDI can be represented as one proportional to that in the domestic market:

$$\text{(21)}$$

where   indicates the relative unit costs of prodution in industry   in country   which is the ratio of foreign unit cost to home unit cost. Thus, higher   means that home has relatively cheaper wage costs than foreign does. In our model, the country's comparative advantages come from this lower wage costs which in turn are driven by country's endowment and factor intensity of sector. Furthermore,   is one of the key factors which affects the firm's choice between exports and FDI.

With combining equilibrium revenue from domestic market, total revenue received by a home firm is

$$\qquad\qquad (22)$$

Consumer love of variety and fixed production costs imply that no firm ever exports without producing for the domestic market and no firm engages in both activities (exports and FDI) for the same foreign market. Hence, we may separate each firm's profit into components earned from domestic sales (   ) and foreign sales (or   ), where we apportion the entire fixed production cost to domestic profit, the fixed exporting cost to exporting profit and the fixed FDI cost to FDI profit:

(Profits of domestic sales)

(Profits of exports)   (23)

(Profits of FDI)

And total firm profit is represented as

$$\qquad\qquad (24)$$

2.4.2 Decision to produce and choose the mode of foreign market access

Now, there are three cut-off productivities, ZPC,   above which firms produce for the domestic market, the exporting productivity cut-off (EPC),   , above which firms export to foreign market, and the FDI productivity cut-off (FPC),   , above which firms conduct FDI to serve foreign market:

$$(25)$$

These results are summarized in Figure 1.
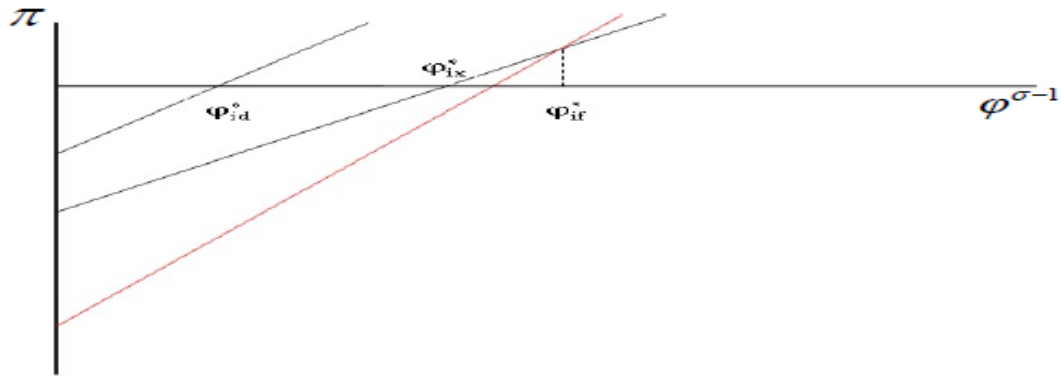
Figure 1. Several productivity cut-offs: ZPC, EPC, and FPC

With using equations in (25), we have two equilibrium relationships, one is between ZPC and EPC and the other is between ZPC and FPC:

$$(26)$$

For values of   , there is selection into markets, i.e. only more productive firms export. In addition, for values of ——   , there is another selection for the modes of foreign market access between exporting and FDI. That is, only the most productive firms conduct FDI to serve foreign market. Since the value of —— depends on transportation costs, fixed costs and   , there are possibilities that the selection for the mode may not occur, i.e. all firms producing for foreign market choose exports or FDI. Further details concerning decision to exports and FDI are covered in later parts of this section. Until that, we focus on the results, where   ——   hold.

Firms' decisions regarding production for the domestic and foreign markets are summarized graphically in Figure 2.

Figure 2.

| Exit | Produce for domestic market only | Produce for domestic and foreign market | Produce for domestic and foreign market / FDI |
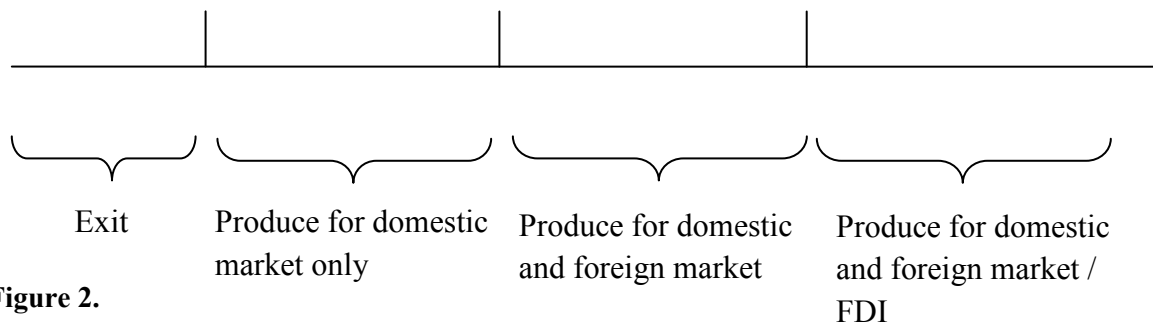
The ex-ante probability of successful entry is $\qquad$, and the ex-ante probability of exporting and the ex-ante probability of FDI conditional on successful entry is

$$\qquad \qquad \qquad \qquad \tag{27}$$

2.4.3 Decision to export or conduct FDI

For producing for foreign market, a firm may choose to export or to use foreign affiliates. And this decision depends on its own productivity and exogenous parameter values. Especially, the latter sets up the condition under which all firms export or conduct FDI regardless their own productivities. Using equations (26), we can find that condition:

$$\tag{28}$$

Where the above condition holds, there is selection of modes which firms choose to serve foreign market, i.e., the condition for coexistence of exporting and FDI. The most productivity firms conduct FDI instead of exporting. This condition implies that the values of several parameters satisfy $\qquad$ and $\qquad$. For the comparative disadvantage industry, however, if DCA is sufficiently low then the condition may not hold. In this case, all firms serving foreign market use foreign subsidiaries. On the other hand, if transportation cost is less than DCA, all firms export when they serve foreign market.

These results are summarized in Figure. 3.

With given fixed costs, D the mode for
serving foreign market can be divided along
τ value.
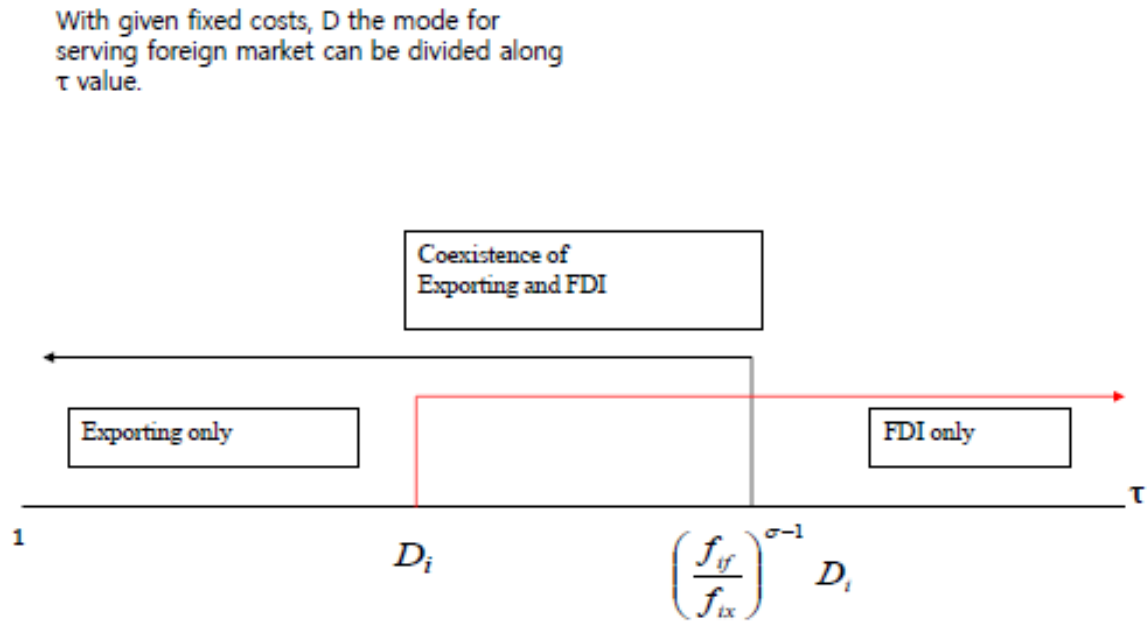
Figure 3

For a while, we focus the case where both exporting and FDI can coexist. However, we also investigate when the inequality in (26) does not hold.

2.4.4 Equilibrium

The expected value of entry is now the sum of three terms: the expected profits from domestic market, the expected profits from exporting to foreign market and the expected profits from producing the good for foreign market by foreign affiliate until the death:

$$\overline{\qquad} \tag{29}$$

Using the definition of weighted average productivity, we can rewrite the above free entry condition as a function of three productivity cutoffs and model parameters:

In equilibrium, ZPC and FPC are related according to equation (24) so as ZPC and EPC are. Therefore, the above condition can be represented as a function of ZPC and parameters. That means we can write ZPC as an implicit function of parameters.

Using the equilibrium pricing rule, industry price indices can be written as:

$$(30)$$

In equilibrium, we also require that the sum of domestic and foreign expenditure on varieties produced by domestic firms(including FDI) equals the total industry Revenue (　) for each industry and country:

$$\text{———} \qquad \text{———} \qquad \text{———} \quad (31)$$

Where, with free entry into each industry, total industry revenue equals total labor payments minus net factor payment. If the above equation holds for all countries and industries, then the goods markets clear at the world level.

The costly trade equilibrium is referenced by a vector of 18 variables in home and foreign:

for 　　　　. All other endogenous variables can be written as functions of these quantities.

Proposition 1. *There exists a unique equilibrium referenced by the pair of equilibrium vectors,*

for 　　　.

3. PROPERTIES OF EQUILIBRIUM

According to BRS(2007), the opening to costly trade is followed by compositional changes within industries, which increase aggregate industry productivity as in single-industry models of heterogeneous firms. However, unlike those single-industry models, the degree of within – industry reallocation varies systematically with comparative advantage, as driven by Heckscher-Ohlin considerations of relative factor abundance and factor intensity.

In our model, there is a possibility of making use of other country's comparative advantage (FDI). Therefore, FDI can play the important role of undermining each other country's comparative advantage, i.e. world become flatter with FDI. This force makes some results

driven by H-O frame changed to the opposite direction. More possibility of FDI is there, stronger does driving force work.

Here, we need to separate the effect of tau falling on economy into 2 steps. In the 1st step, when country starts to open their market from autarky status and trade cost (tau) still high enough to prevent firms export in all industries. And the 2nd step, when trade cost (tau) steadily falls down, hence exporting becomes a possible option for some firms.

Proposition 2: For the 1st step

(a) The opening of a closed economy to international trade with positive fixed and high enough variable trade costs will increase the zero-profit productivity cutoff, below which firms exit, and will increase average productivity in both industries (the 1st step).

(b) Other things equal, the increase in the steady-state ZPC and average productivity is greater in a country's comparative disadvantage industry (the 1st step).

Until now, we just ignore that firms can serve domestic market through producing the good with cheaper foreign resource as well as foreign market, i.e. the possibility of foreign (home) being used as export platform by home (foreign) firms in some industries. When we consider that possibility formally, then the above results must be changed.

We will see how responses of firms to the falling trade cost change from the previous results in next works.

4. NUMERICAL SOLUTIONS

In this chapter, we parameterize the model and solve it numerically.

To solve the model numerically, we assume a Pareto distribution for ex-ante firm productivity following many previous works, which is both tractable and provides a good approximation to observed within-industry productivity distributions:

$$g(\varphi) = ck^c \varphi^{-(c+1)} \quad \text{where} \quad k > 0, \ c > 0 \quad \text{and} \quad \varphi \geq k$$

Where k > 0 is the minimum value for productivity, and a > 0 is a shape parameter that determines the skewness of the Pareto distribution. We assume a > sigma − 1 so that log firm sales have a finite variance.

Here are several parameter values used in calculating a numerical solution.

Fixed production costs: $f_1 = 0.10$, $f_2 = 0.10$.
Sunk entry costs: $f_{e1} = 2$, $f_{e2} = 2$.
Probability of firm death: $\delta = 0.025$.
Industry expenditure shares: $\alpha_1 = \alpha_2 = 0.5$.
Elasticity of substitution: $\sigma = \frac{1}{1-\rho} = 3.8$.
Industry factor intensities: $\beta_1 = 0.6$, $\beta_2 = 0.4$.
Pareto parameters: $k = 0.2$, $c = 3.4$, which since $c > \sigma - 1$ satisfies the requirement for the variance of log productivity to be finite.
Fixed exporting costs: $f_{x1} = 0.10$, $f_{x2} = 0.10$.
Variable trade costs: τ_1 and τ_2 range from 1 to 1.6 in increments of 0.5.
Factor endowments: $\bar{L}^H = 1000$, $\bar{S}^H = 1200$, $\bar{L}^F = 1200$, $\bar{S}^F = 1000$.

Fixed FDI costs: ff1 = 0.20, ff2 = 0.20

Variable trade costs: tau range from 1.2 to 1.6

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4i for Innovation Capacity Development in the Public Sector

Abstract:

It is widely accepted that innovation is a key driver of economic growth and a key success factor of enterprises. Innovation, however, must also be present in the public sector, especially when environmental changes (for example, consequences of the economic crisis, or constantly growing performance-orientation) require new ways of thinking and new methods for operations. In the literature it is debated how the novelty can and should be interpreted. A definition of public sector innovation could be: delivering public services in a better way by introducing new processes in the public sector, or adjusting existing ones from the private sector or from other countries to suit national/local needs. This definition emphasizes the role of public administration aimed at enhancing the performance of public service delivery, and implies that an innovative public sector will have a certain extent of adaptability, reactivity, and flexibility, while novelty might come from a wide range of sources. Our paper summarizes what obstacles the public sector faces in developing, elaborating, implementing, and spreading innovations as well as maintaining the drive for innovations. Among others, public expectations, cultural factors as well as the risk avoidance of the public sector are described in details. It is claimed that the innovation capacity (or the readiness to innovate) of a public sector organization can be developed. The paper introduces a model about the factors that influence capacity to innovate. These factors can be grouped into four categories (4i model for innovation capacity development): information (one has to have access to the knowledge that can be used for innovation), inspiration (one has to be able to come up with new ideas), incitation (one must be motivated to share his or her ideas with others), and institutions (for promoting and supporting innovation). For successful innovations in the public sector, all the four elements must be present.

Guler Koca

Rana Karasozen

Migration and Urbanization Challenges in Turkey

Abstract:
In terms of modernity; migration is defined as changing people their living place willingly. Migrations from rural areas to cities caused social transition from the society of agriculture to the society of industry. The years between 1945 and 1980 are the most intensive period that migration took place in Turkey and increasingly continued until today. Housing stock and infrastructure of the cities receiving migration were inadequate for the requirements of the migrating people.

The new residents solved their housing need by building unauthorized houses known as squatters which are distinct from the cities both physically and socio-culturally and their integration to the city life is very difficult. The former and new residents of the city have huge barriers between them such as exchange of services and information, way of life, thoughts, beliefs, judgments, traditions, dialects and in short, cultures.

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Wen-Hua Liang

The Role of Multimedia in Translation Teaching

Abstract:
Translation has been an important way of international communication in the 21st century, a time when multimedia is literally dominating the field of communication. Instead of text or linguistic translation, translation teaching must incorporate multimedia into it, that is, adding different elements of multimedia content, such as image, audio, and video to translation teaching. This paper intends to discuss a translation class which has applied various forms of multimedia into teaching and learning, including advertisement, picture book, music video, animation and TV program, Detail plans and objectives of each form in this class will be presented and discussed.

Tsang Lang Liang

Development of Teaching Material for an Innovative Course Based on Experts Specialized in Innovation and Patents at Technological Institutes in Taiwan

Abstract:

The purpose of this study was to develop teaching materials for an innovative course based on commercialized patents at technological institutes. The teaching material, teaching strategy and instruments of evaluation were developed based on the experts of innovation. This study could provide as a model of curriculum design and teaching materials for innovational course emphasized on commercialized patents. Finally, the results of this study provide as a reference for institutes of technology to nurture the innovators after graduation. In order to achieve the above purposes, this study applied qualitative research method such as document analysis, systematic observation, in-deep interview, focus group and Delphi technique with innovators who have experienced innovation and owned patents in industrial sectors and the professors who teach in the institute of technology. Based on the interview with the subjects of this study, the findings were the competency of innovation, course objectives and course outlines and teaching material for the students of institutes of technology. The results also help to establish a model for those students to cultivate their ability of commercialized patents. The results of this study included four stages of innovation, 12 key competencies and 53 teaching objectives, and teaching material.

Daniel Yet Fhang Lo

K.W. Chau

Causal relationship between spatial structure of economic activities and growth: An empirical investigation of Brazil

Abstract:
The agglomeration effects on growth have been abundantly documented in urban literature, yet, the same cannot be said for the reverse causality, which poses endogeneity problems for the estimation of growth models. In addition, most, if not all, of the relevant empirical research use some conventional indicators such as labour density to proxy the level of agglomeration, without acknowledging the actual spatial structure of the economic activities that could be better captured by spatial autocorrelation (s.a.) measures. In light of this, and using panel data from the 26 states of Brazil in 2001-2009, this paper attempts to throw additional light on the growth literature by examining the Granger causality between growth and agglomeration using spatial autocorrelation techniques in a VAR framework. Our results suggest that (i) economic activities in Brazil are spatially autocorrelated.

Petr Maleček

Quarterly Fiscal Impulses in EU Countries

Abstract:
The concept of cyclically adjusted balance has been widely used to identify the underlying structural part of governments fiscal policies, independent from the business cycle. This paper seeks to briefly present a methodology for capturing this measure on quarterly frequencies, using the production function as a basis. Next, a country-specific analysis of several EU countries will be presented.

Keywords: fiscal policy, cyclically adjusted balance, production function
JEL classification: E32, E62, H30, H60

1. Introduction

For several decades, there has been an endeavour to disentangle effects of government policies and effects of business cycle on the government balance. In other words, the initial idea is to decompose the total fiscal impulse (which can be defined as a change in nominal or primary government balance to GDP ratio) into the change in cyclically-adjusted balance and the effect of automatic stabilisers. The latter item should then in theory relate to business cycle-sensitive items of government balance, and should therefore capture above all tax shortfalls/windfalls and cyclical unemployment expenditure.

Over time, many different methods have been developed to compute the underlying cyclically-adjusted balance. Today, perhaps the most widely used method utilises sensitivity parameters of several items in government revenue and expenditure to the output gap, or similarly, the overall sensitivity of the government balance. This approach is also used in many international institutions as well as governments.[77]

In this paper, we will also deal with this method, using data on quarterly frequencies, which poses several methodological obstacles. The methodology will be briefly presented in Chapter 2, following a section describing several caveats inherent to this widely used method. Final section will make use of preceding ones and present the results of the methodology using data for several EU countries, and show the comparison between the overall fiscal impulse and the fiscal effort, i.e. the change in cyclically-adjusted balance. In addition, a short analysis of quarterly fiscal stances in EU countries will be laid out.

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[77] See e.g. Congressional Budget Office (2001), Girouard and André (2005) or Larch and Turrini (2009)

2. Methodology for calculating quarterly fiscal impulses

In this section, we will briefly present a methodology to measure quarterly fiscal efforts. To start with, we will define the cyclically-adjusted primary balance (CAPB) as an identity: the primary balance of the government sector[78] less its cyclical component, see (1). A discretionary fiscal impulse, or alternatively, fiscal effort, can be then defined as year-on-year change of the cyclically-adjusted balance.

$$CAPB_t \equiv PB_t - CC_t \qquad (1)$$

In terms of percentage of GDP, the quarterly CAPB can be expressed as a ratio of primary balance to the moving sum of quarterly seasonally adjusted nominal GDP minus the cyclical component. Here, due to the computational difficulty exceeding the scope of this paper, sensitivity parameters to changes in output gap (ε) are taken directly from the OECD study,[79] while merging the particular elasticities into one, as presented e.g. in Larch, Turrini (2009). Note that the CAPB here needs to be annualised, as the sensitivity parameters refer to yearly primary balance to GDP ratios.

$$capb_t = \frac{4 \cdot PB_t}{\sum_{\tau=-3} DP_\tau} - \varepsilon \; og_t \qquad (2)$$

Next, the (quarterly) output gap at time t can be then defined as a ratio of seasonally-adjusted quarterly real GDP to the quarterly potential product.[80]

$$og_t = 100 \cdot \left(\frac{GDP_t}{Y_t^*} - 1 \right) \qquad (3)$$

The potential product itself can be calculated on the basis of many various methods. For further purposes, we will use the standard Cobb-Douglas production function with implicitly treating technological progress as Hicks-neutral.[81] In equation (4), Y denotes the seasonally adjusted quarterly real GDP, K and L the capital and labour components, respectively, and A the Solow residual, or equally, the total factor productivity.

$$Y_t = A_t \cdot K_t^{\alpha} \cdot L_t^{\beta} \qquad (4)$$

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[78] Equals the net lending/borrowing of the government sector plus interest expenditure.
[79] Girouard, André (2005)
[80] Fedelino et al. (2009, p. 3)
[81] Romer (1996, p. 7)

Further, we will adhere to the original Solow growth model by keeping constant returns to scale, i.e. $\alpha = 1 - \beta$.[82] For the sake of simplicity and avoiding possible data issues while determining the share of labour and capital in the economy,[83] we use the same weights for each country, 0.35 for capital share and 0.65 for labour share, as in d'Auria et al. (2010, p. 9). The potential product would be then calculated in the same way as in equation (4), while using *potential* capital, labour and TFP components.

For the capital stock, we will use the perpetual inventory method, as it is arguably the most suitable for quarterly data, especially due to generally poor availability of direct survey data. By this method, we need to take two technical assumptions. First, we set an estimate for the initial capital stock as 3 times real GDP in 1996, which could be reasonable for most countries.[84] Secondly, the annual depreciation rate is here taken as 0.05,[85] so that the quarterly depreciation coefficient equals the fourth root of 0.95. Finally, we will set the potential and actual capital stock equal, as discussed in further detail e.g. in CBO (2001, p. 18).

$$K_t = K_{t-1} \cdot \left(1 - 0.05\right)^{0.25} + GFCF_t \tag{5}$$

To estimate the potential labour component, we will use the headcount figures, similarly as in the case of the capital component again due to the lack of credible quarterly data on hours worked for many countries. As shown below, the labour component can be conveniently decomposed into working age population, trend participation rate and the non-accelerating inflation rate of unemployment (NAIRU).

$$L_t^* = pop_t^{15-64} \cdot part_t^* \cdot \left(1 - NAIRU_t\right) \tag{6}$$

As for the potential participation rate, we would apply the simple HP filtering with lambda set at 1600. A crucial point is to estimate the quarterly NAIRU. For this, we would use the approach presented in Elmeskov (1993, p. 94), which utilises the Philips curve relationship. According to this model, nominal wages will rise (fall) when unemployment rate is below (above) NAIRU. We will somewhat alter the model to take into account not nominal, but real wages, as e.g. in d'Auria et al. (2010, p. 72). After some rearrangements, the final NAIRU term can be written as follows. Here, u_t denotes unemployment rate at time t, and w_t compensation per employee.

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[82] Romer (1996, p. 8)

[83] A precise calculation of labour share would imply summing the wage share with the part of gross mixed operating surplus and mixed income related to the labour factor, for further reading see e.g. Batini et al. (2008, p. 8). Further, as implied by this model, changes in the α or β parameters results only in different *contributions* to capital, labour or TFP growth to potential growth. These changes generally cancel each other out, so that the sensitivity of changes in α or β to the potential growth or output gap is rather small.

[84] Setting a fixed capital to output ratio at a given base year has been an usual way to tackle this PIM-related issue, see e.g. d'Auria et al. (2010, p. 6)

[85] Following Mourre (2009, p. 60)

$$NAIRU_t = \iota_t - \frac{\Delta_t \cdot \Delta \ln w_t}{\Delta \ln w_t} \tag{7}$$

Finally, following Elmeskov (1993, p. 94), the final NAIRU estimates are, first, adjusted for obvious outliers, using a linear interpolation, and secondly, HP-filtered (with λ=1600) in order to get rid of the existing stochastic variance.

The final and vital part is estimating the potential TFP. A wide range of methods can be applied; for example, d'Auria et al. (2010, p. 11) uses for selected EU countries the Kalman filter technique exploiting the link between the TFP cycle and the degree of capacity utilization. Further, there exist several univariate statistical methods, e.g. extended exponential smoothing as in Bassanetti et al. (2006) or band pass filter in French (2001). To avoid unnecessary complexity and possible issues with regard to applying the single TFP sub-model to many different countries, we will consider the potential TFP as a *trend* TFP, using the simple HP filter, which is a commonly used method. However, there is an obvious problem for determining the optimal value of the lambda parameter;[86] in line with other studies,[87] we would retain the originally proposed value of 1600. Also, to avoid the end-point bias associated with the HP filter, that can be detrimental in this case, we would extend the TFP data up to 2014 using a simple linear trend over the whole time sample.

3. Several caveats concerning the methodology

Having specified the methodology, it is now important to mention some of its drawbacks that are generally acknowledged by many authors. Perhaps the most general remark is that discussed e.g. in Blanchard (1990, p. 6). This author argues that every methodology trying to separate the "structural" part out of the government balance inherently omits a number of factors that may be significant for the overall picture.

Next, as discussed earlier, the sensitivity parameters to the output gap are fixed across the whole time series. Obviously, due to their method of estimation, they can be perceived as *average* sensitivities over a given time period. However, as discussed in more detail e.g. in Bouthevillain and Quintet (1999, p. 334), these sensitivity parameters tend to be correlated with the business cycle. The effects of this phenomenon can be seen today in European countries struck by the sovereign debt crisis and shows that tax collection tends to severely deteriorate during deep crises.

While mentioning methodological issues, on several occasions, the HP filtering is used. Therefore, the whole outcome takes over inherent drawbacks of this statistical method, namely its end-point bias.

On a related note, a government may be unaware of the "true" output gap at time it makes its decision about its fiscal stance. Figure 1 below demonstrates this fact on calculated figures for the Czech Republic. In this figure, we examine output gap in the third quarter of 2007, i.e. in the midst of the boom times, as it would have been calculated in various quarters (*x* axis). It is clear that in Q3/2007, this methodology wouldn't show major signs of overheating, as the output gap would reach only cca 0.5% of GDP. On the other hand, shortly after the crisis in

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[86] French (2000, p. 6) argues that after having done variance decomposition of cyclical and trend shocks in the US during 1960-1990, the lambda should be higher than 1600. However, due to the difficulty of determining the actual "higher" value, he further refers to the original 1600.

[87] Faal (2005), Konuki (2008) and others.

2009, it would have been obvious that the amplitude of the business cycle had been much higher, so that now the estimate of output gap in Q3/2007 reaches 3.3% of GDP. It should be noted that Figure 1 describes only revisions of output gap stemming from the presented methodology itself; another important source of uncertainties are revisions of the underlying data itself by statistical authorities, notably the real GDP.

Throughout this paper, we use *accrual* fiscal data, as opposed to *cash* data. In some cases, accounting for significant receivables/payables in one quarter with no direct impact on aggregate demand could distort the economic interpretation. A typical example of such accounting-related outliers can be the Hungarian treatment of the second pension pillar. Obviously, for correct interpretation of calculated data, all quarters should be in theory adjusted for such outliers. Next, cash data are not very suitable for such calculations, as they typically describe only a section of the general government sector.

Figure 1: Output gap of the Czech Republic in Q3/2007, as calculated in different quarters
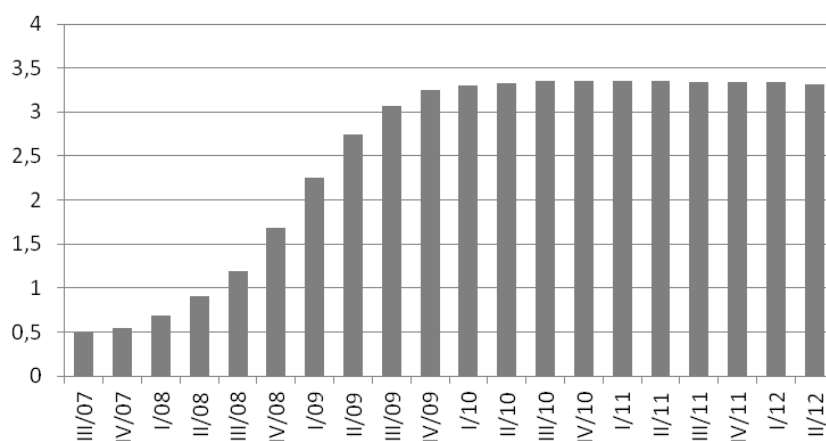
Source: Eurostat, own calculations

Finally, in this paper, we would refrain from using q-o-q changes, as these would imply the necessity for seasonal adjustment of quarterly net lending, that would require deep specific knowledge of the fiscal set-up in each country. All changes are then taken in y-o-y terms.

3. Measuring fiscal impulses

Having specified the methodology and its main caveats, we can now turn to the actual analysis of the results. Figure 2 shows the decomposition of total fiscal impulse in the model country (France) as calculated by the described methodology. The solid line represents the total fiscal impulse, here defined as y-o-y change in primary balance, darker-shaded column the discretionary fiscal impulse (y-o-y change in the cyclically-adjusted primary balance) and columns in lighter tone represent cyclical component of fiscal policies, dependent on the output gap. In this setup, negative numbers mean fiscal expansion, positive numbers fiscal restriction.

We chose France to show several patterns typical for many other European countries. The first notable feature is that the deterioration of primary balance during the 2009 was caused by

both discretionary fiscal expansion and the effect of economic stabilizers. It is clear from the Figure that the largest y-o-y fiscal impulse to counter the economic crisis was conducted in the second and third quarter of 2009, and amounted to ca 4 pps. of GDP. On the other hand, France began to consolidate its public finances from 2011 onwards, whereas this endeavour has been helped by the relative benign economic conditions, as the output gap turned slightly positive and the cyclical revenues started to somewhat pour in (as indicated by the positive contribution of automatic stabilizers).

Figure 2: Fiscal impulses in France (y-o-y)
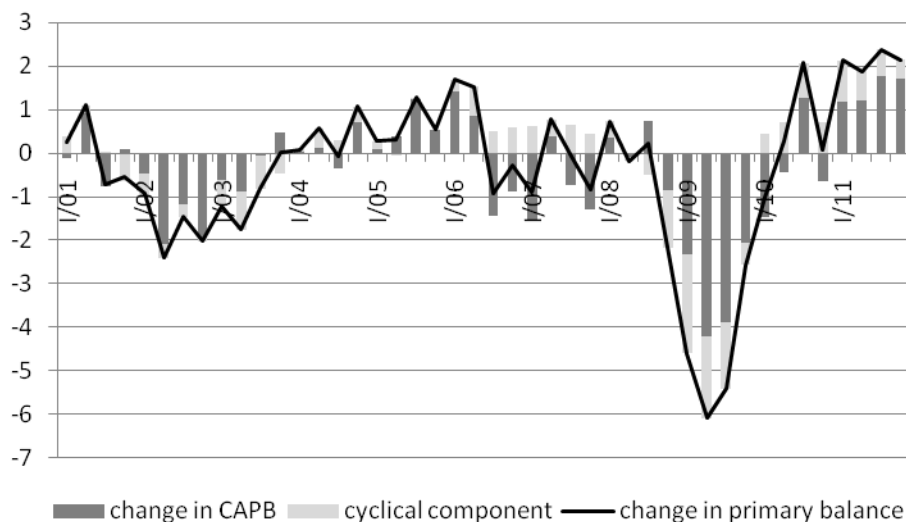
Source: Eurostat, own calculations

One of the next possible applications of the resulting time series of the quarterly CAPB is the standard analysis of fiscal stance in selected countries, see e.g. Turrini (2008). We can then plot the output gap on the *x* axis and y-o-y change of CAPB on the *y* axis. Then, it is possible to see whether the fiscal policy has been pro- or countercyclical.

Figure 3 shows the results for the period Q1/2001 to Q2/2012. The quadrants have the following interpretation: I) countercyclical restriction, II) procyclical restriction, III) countercyclical expansion, IV) procyclical expansion. According to the standard Keynesian approach, government should pursue countercyclical policies, i.e. conduct either fiscal restriction in "good times" (a positive y-o-y change in CAPB during positive output gap period) or fiscal expansion in "bad times" (a negative y-o-y change in CAPB during negative output gap period).

We have plotted the data for two EU countries where the average fiscal stance over the mentioned time period is the most striking. Finland managed to have countercyclical policies even before the crisis, which allowed this country enough fiscal space to counter the 2009 crisis with fiscal expansion. On the other hand, Greece – a country struck by the sovereign debt crisis – conducted procyclical expansion even before the onset of the crisis and has been forced to resort to severe fiscal restriction in times where the output gap has been negative.

Clearly, the "ideal" fiscal policies should lie in the proximity of a 45-degrees line intersecting the first and third quadrant. As a rough estimate of fiscal policies' plausibility, we can use Pearson's correlation coefficient. For plausible fiscal policies in this Keynesian sense, it

would be close to 1, as opposed to -1 in the least plausible case. Figure 4 presents the results for several EU countries. In many cases, fiscal policies seem to be indifferent to the business cycle, the correlation coefficient being close to zero. A clearly procyclical fiscal stance is also clear in all Baltic states. However, all these results need to be taken with due caution in light of topics presented in the previous Chapter.

Figure 3: Fiscal stances in two illustrative EU cases
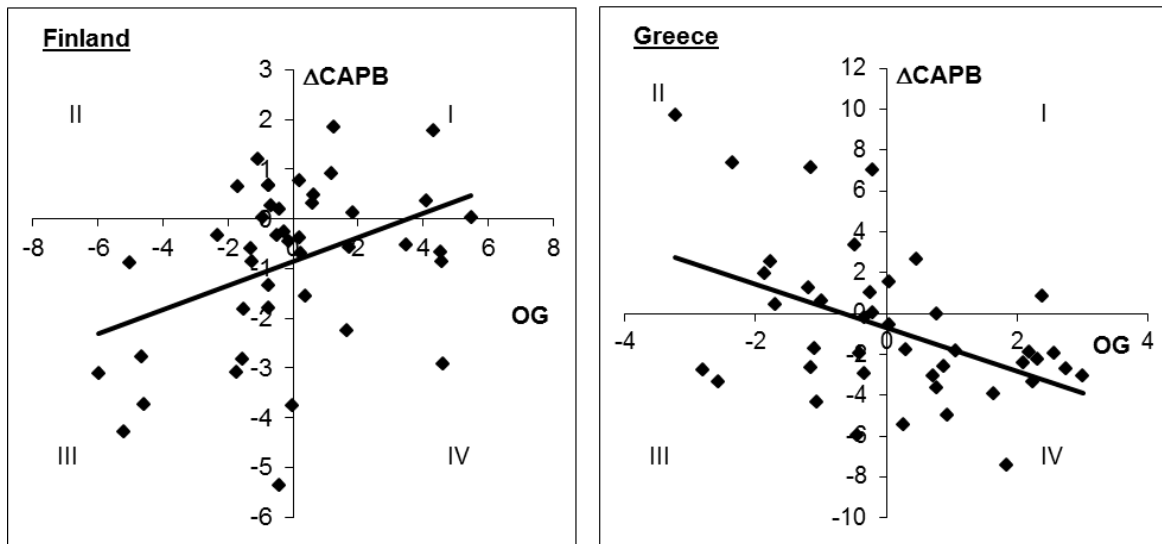
Source: Eurostat, own calculations

Figure 4: Correlation coefficients describing average fiscal stances of selected EU countries over Q1/2011 to Q2/2012

Belgium	0,08	Latvia	-0,35
Czech Rep.	0,02	Lithuania	-0,35
Denmark	-0,02	Hungary	0,05
Germany	0,04	Netherlands	0,05
Estonia	-0,46	Austria	0,04
Ireland	0,21	Poland	-0,15
Greece	-0,53	Portugal	0,21
Spain	0,03	Slovakia	0,11
France	0,41	Finland	0,40
Italy	0,08	United Kingdom	0,25

Source: Eurostat, own calculations

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Marek Martin

The Barriers to Growth of Biotechnology Companies in Emerging Economies; Regional Case Study Analysis

Abstract:

This paper presents the key results emerging from the case study analysis carried out in SME biotechnology companies located in Lodz Region (Central Poland). The research was carried out in the form of face to face in depth interview with the key people representing biotechnology companies operating in the region. This research is a part of the larger project titled the "Conditions and Perspectives for Development of Biotechnology Companies in Poland".

The main findings of the research indicate the significant diversification between the barriers to growth of well established companies and the new business start-ups and university spin-offs. These differences in general are in line with typical variation of barriers to growth of business units along their cycle of development. In the case of newly established business units the most important barriers are associated with financial limitations and underdevelopment of financial institutions. The overall high capital intensity associated with long period of capital investment in the field of biotechnology are not recognised by financial institutions. Respondents stressed the lack of the competences of financial institutions and simplistic, underdeveloped and inappropriate approach to new business ventures' assessment. Excessive level of protection of intellectual property rights and its overall counter-productivity was also highlighted by the respondents. Well-established business units stress the importance of human barriers and barriers associated with the economic policy of the state and legal regulations. Especially associated with accounting regulations applicable to business R&D projects and the regulations associated with the administration of publicly funded research projects coordinated by the business units. Recent regulations shift the distribution of risk and in a process are discouraging for business units considering significant research and development projects. The respondents representing well-established business units also stressed the importance of market barrier associated with the inhibited level of acceptance of new innovative products originating from domestic companies.

Key words: biotechnology firms, growth, barriers, emerging economies, innovation, technological change.

JEL Codes: O1, O3, O4, D24

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Marek Matejun

Instruments Supporting Development in the Life Cycle of Small and Medium-Sized Enterprises

Abstract:

Small and medium-sized enterprises (SMEs) play an important economic and social role in most countries of the world. Despite the significant internal diversity of the SME sector, a considerable part of this group consists of entities oriented towards development and growth. Because of their characteristic features, they are often unable to achieve their developmental goals based exclusively on their own resources. There then exists the alternative of using external development-supporting instruments offered by commercial and non-commercial small-business-related organisations in various regions of the world.

Absorption of these instruments depends on many factors, in particular the needs and limitations characteristic of a specific stage in an organisation's life cycle. With this in mind, **the goal of this paper** is to identify and assess the scope of use and factors determining the use of development-supporting instruments in the life cycle of small and medium-sized enterprises. The study includes a review of international literature on the subject, as well as a presentation of the author's own model of the SME life cycle, composed of eight developmental stages. The work also includes empirical research conducted on a sample of 377 micro-, small-, and medium-sized enterprises operating in the European Union.

Keywords: Instruments Supporting Development, Small and Medium-Sized Enterprises, Business Life Cycles, Development, Growth, Entrepreneurship.

JEL classification: L26

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Roman Matkovskyy

To the Problem of the Analysis of the Interdependent Development of Countries: the Neighbourhood Systém Model

Abstract:
The goal of this research is to develop the methodological framework to model and analyse interdependent development of countries based on the neighbourhood system model. For the purpose of neighbourhood influences estimation the methodology of multiscale modelling, especially Random Fields, can be applied. Random field theory is used in seeking a model of complex patterns of variation and interdependence while deterministic treatment is inefficient. Random fields with Markov processes are particularly of interest since the main idea of Markov Random Fields is that the distribution of the process at some location depends on the values of the processes at neighbouring locations. In the case of sufficiently large disorder, which takes place in economic systems, Markov random fields model complex patterns of variation and interdependence and may capture the essential features of economic phenomenon with random characteristics on temporal or spatial scales. Other important feature of random field is patterns of correlation and persistence that are reflected in the second-order statistics (c.f or spectral density function (s.d.f.)). It will potentially answer the next main questions: How do neighbour countries influence country development? What kind of relationship (cooperative or competitive) dominates between countries? How does it influence countries' development? Are any cyclic dependencies among countries from the point of view of cooperation or conflicts? etc. Generally speaking, applying MRF to macroeconomic analysis will help to define the current state of a country via knowledge pertaining to what is happening in its neighbourhood. The model, based on MRF, represents the local characteristics of countries, combined with their conditional distribution under the Bayesian framework. It will enable the accurate estimation of the true characteristics of countries. Every country is a random field in which countries variables are regarded as random variables. The macro-economic variables will be used for the purpose of this paper: Gross Domestic Product (GDP), trade gap (TG), inflation, labour migration and productivity, net national income (net NI), real household income and consumption. Therefore, each country depends upon its environment that can be described through the above mentioned variables (the list of them may be expanded, depending what particular interdependence we intend to analyse). This environment is changed by neighbour countries. Further theoretical research may be in developing of the procedure to ML estimation of MRF parameters with imperfect observations. There is also needed to formulate the models for the analysis of data that exhibit non-Gaussianity and nonlinearity.

Sibonginkosi Mazibuko (Ph.D)

Changing Gears: From GEAR to NGP with South Africa's Macroeconomic Strategies

Abstract

This paper addresses three issues in relation to macroeconomic development and its ability to address the development challenges of poverty, unemployment and inequality in South Africa. These issues are: the theoretical basis of these policies; the contrast between the two macroeconomic policies of GEAR and NGP; and the way in which South Africa hopes to finance its development efforts. This paper argues that the theoretical underpinnings of the new macroeconomic policy are fundamentally those of modernisation (which, itself, is based on various growth theories). This paper therefore argues that, at the theoretical level, there is little difference between the old macroeconomic policy of GEAR and the newly adopted policy of NGP in that NGP outcomes could prove difficult to achieve. This paper further argues that it is by no means clear how NGP will be financed and that South Africa could find herself borrowing heavily to finance its development path.

Key words: Development, theory, South Africa, economic policy, inequality, poverty, unemployment

1. Introduction

Political emancipation has enabled the majority of the South African population to enjoy freedoms and rights that, in the past, were designed for and allocated exclusively to the white minority. However, this political freedom has not been matched with economic freedom. South Africa still faces the developmental challenges of mass poverty, unemployment and inequality and, today, remains one of the world's most unequal societies. Although the country adopted the macroeconomic policy of Growth, Employment and Redistribution (GEAR) in 1996 which, according to Bank (2010, p187), was designed to speed up economic growth, attract foreign investment and improve competitiveness; as it is, these challenges remain. In 2009, the South African government once again approved a new macroeconomic policy that is aimed at addressing the country's problems of inequality, unemployment and poverty. The new policy, NGP, identifies drivers and the actual numbers of job opportunities that can be created in the various identified sectors. In the words of Gordhan, the Minister of Finance (2011),

> … Employment growth is far too slow…We face a very serious unemployment challenge, particularly amongst our young people. This is the most important reason why we have adopted a New Growth Path – a set of

policy measures and practical reforms that accelerates (sic) the creation of job opportunities and achieves an inclusive and durable transformation of our development trajectory….

This paper aims to analyse three aspects: (1) the validity of the theoretical premises upon which the government's thinking is based (in this regard, although not explicit in the macroeconomic framework of the New Growth Path (NGP), two theoretical premises can be identified, namely the New Growth theory and the Balanced Economic Growth theory; (2) the extent to which the NGP differs from the previous strategy of GEAR; and (3) whether the South African government has the resources to realise the stated goals. The analysis is based on a careful reading of literature on the South African macroeconomic policy.

2.   Poverty and unemployment in South Africa: a brief historical background

Vollgraaff (2011, p.3) states that:

> The unemployed are predominantly young people from previously disadvantaged communities and most have never had a job... The catch-22 is that if you never had a first job and you do not have work experience it is very difficult to gain that experience and be accepted into the workplace.

While poverty and unemployment are not unique to South Africa, they are unique in terms of their extent, severity and character. This uniqueness is, fundamentally, based on historical factors. Poverty and unemployment in South Africa are largely the intended results of both colonial and settler-colonial (apartheid) rules. That poverty and unemployment are particularly severe among the black majority, and are largely the defining factor for black people, cannot be seen merely as the 'nature of things': poverty and unemployment are the direct results of centuries of economic exploitation, political subjugation, cultural denigration and marginalisation, and social exclusion by colonial and settler colonial regimes. Any policy in South Africa today that ignores these factors is unlikely to make any meaningful contribution to development.

The South African 1913 Land Act (Natives Land Act, 1913), which Wilson (1971, p.127) refers to as 'the basis of the country's future policy of apartheid', for example, determined people's access to land - a fundamental asset in an agrarian society as South Africa was at the time. While the European descendant populations had control over 87% of the land, the indigenous African populations were restricted to the 13% of marginal land that they could not own in the Bantustans under the Bantu Authorities Act of 1951(De Villiers 1971, p.411). The results included overcrowding, unsustainable subsistence farming, and heavy reliance on natural resource-based livelihoods such as handicrafts. The 1913 Land Act was, in effect, a culmination of land dispossession which had been legalised in the Glen Grey Act of 1894. That Act imposed taxes of various kinds on Africans in the Cape to force them into selling their labour power. Welsh (1971, pp.181-182) states that:

> … African reserves were regarded by whites as 'reservoirs of labour', and congestion, landlessness, and crop failure were welcomed as stimulants to the

labour supply. But similar phenomena among whites were viewed as national calamities.

Human capital was also heavily suppressed under the apartheid discourse. It has since been recognised that Bantu education represented one formidable pillar of the apartheid system. The policy of Bantu education, enacted in 1953, ensured that the African population received an inferior education that was designed to ensure that Africans could only survive by serving the interests of white supremacy and capitalism. This was made clear by its architect, Verwoerd, when he declared in parliament that (Omond 1985:80; Welsh 1971, p.225):

> Native education should be controlled in such a way that it should be in accord with the policy of the state…If the native in South Africa today in any kind of school in existence is being taught to expect that he will live his adult life under a policy of equal rights, he is making a big mistake… There is no place for him in European community above the level of certain forms of labour.

The settler colonial state in South Africa went to considerable trouble to ensure that Africans never rose to any level educationally. It established universities that exclusively served the interests of the black population as defined by the settler state – universities where there were no faculties of medicine or engineering. Non-whites who wished to study in those fields had to obtain special permission from the state to study in white universities, where European children had access to all forms of scientific knowledge. Today, in South Africa, the overwhelming lack of skills is largely the repercussion of this colonial and settler-colonial approach to 'development'. The result has not been poverty and inequality biased against Africans but, instead, an entire economy that is dysfunctional. Rodney (1973, p.3) has this to say about the role of scientific knowledge:

> A society develops economically as its members increase jointly their capacity for dealing with the environment. This capacity … is dependent on the extent to which they understand the laws of nature (science), on the extent to which they put that understanding into practice by devising tools (technology), and on the manner in which work is organised.

Financial assets were also severely restricted under the colonial administration. Wages for the African people were tightly controlled by the Wages Determination Act of 1925. Through this Act, wages for Africans were kept below those of other racial groups and this ensured that Africans remained in perpetual (income) poverty, making them unable to attain the same levels of wellbeing as their white counterparts. Also, because the Africans had no property that they could call their own, they could not even qualify to obtain credit from financial institutions, institutions which toed the government line of excluding Africans from the general economy. Without proper education to provide them with skills, Africans turned to petty trading and hawking, petty production such as beer-making and handicrafts, and child-minding; a few of them bought cars to serve as taxis (May1996, p. 13).

At a social level, apartheid led to social exclusion. The different racial groups were, by law, not allowed to interact with each other. In this regard, social capital was badly affected as people could not benefit from each other's life experiences. The Group Areas Act of 1950, for example, determined where different racial groups should reside, while the Mixed Marriages Act of 1949 controlled people's lives even in their bedrooms, by banning inter-racial sex and marriages. Single-sex accommodation for those that had migrated to cities also ensured that families did not live together. Consequently, Africans had their lives torn apart not only at a national level, but also at a family level. Ramphele (2002, p.65) has this to say about the migrant labour system in South Africa:

> The migrant labour system expected African women to divide themselves into faithful wives who ran the rural household and mothers who nurtured the children that would become the economy's labour force. For eleven months of the year these women were to lead celibate lives and focus on mothering the children. Little consideration went into the difficulty of re-establishing intimacy between husband and wife…

At the risk of oversimplifying, the purpose of this section has been to show that the conditions of unemployment, poverty and inequality in South Africa are largely man-made. The positions enjoyed by the few during the colonial and settler colonial periods are still characteristic of present-day South Africa. In general, African livelihoods are dependent on subsistence food production in the rural areas, petty trading and working in the periphery of the national economy in the cities. The majority of the black population lack the vital education, training and skills that could help them make a meaningful contribution to the national economy. The results have been weak economic development, unemployment, poverty and increasing inequalities between the racial groups as well as between the various social classes including gender. According to the World Economic Forum (WEF) (2011, p.8), South Africa ranked number fourteen (14) in terms of gender disparities in the world. The WEF uses the Global Gender Gap Index to examine the gap between men and women in four fundamental categories of economic participation and opportunity, educational attainment, health and survival, and political empowerment. South Africa's position has been in decline since 2009 from rank 6; in   2010 its rank was 12.

3.   Post-apartheid attempts at macroeconomic reconstruction

Understanding the South African post-apartheid economic history is fundamental to understanding the conceptualisation and practice of the macroeconomic policies that have been implemented so far. To begin with, we wish to state that macroeconomic policy debates began early in the 1990s before the democratic elections that led to the new dispensation in South Africa. One key element in that history was the Macroeconomic Research Group (MERG), which made key findings about the route the democratic economy had to take. This was followed by the Reconstruction and Development Programme (RDP). The RDP itself came to an end immediately after the implementation of the Growth, Employment and Redistribution (GEAR) macroeconomic strategy in 1996.

3.1 Growth, Employment and Redistribution (GEAR)

Several attempts have been made since 1994 to address the double evils of poverty and unemployment in South Africa. In 1996 - the same year the Reconstruction and Development Programme (RDP)[92] office was closed - the Mandela government introduced the macroeconomic policy of GEAR. Aimed at creating an environment for human development, the RDP was more of a development strategy than a mere macroeconomic strategy. It was designed to increase government expenditure, for example, on education, health, welfare, safety and security and infrastructure. Its primary purpose was to specifically address the legacy of apartheid. On the other hand, the GEAR strategy was aimed at building an economy that would experience fast growth and be competitive internationally. To achieve the GEAR objectives, policies were instituted that were designed to reduce fiscal deficits, lower inflation, maintain exchange rate stability, decrease barriers to trade and liberalise capital flows.

However, the reality is that GEAR had no conceptualisation of poverty and unemployment. Instead, it broadly referred to 'economic growth' in the hope that the trickle-down effect would take off and set the economy on a growth path that would create jobs and reduce poverty. Mazibuko (2000) referred to GEAR as a home-grown kind of structural adjustment programme that was to have negative effects on public spending and consequently on social service delivery in South Africa. In the end, GEAR was denounced by both members of the tripartite alliance – the Congress of South African Trade Unions (Cosatu) and the South African Communist Party (SACP) – as a neo-liberal macroeconomic model that led to shedding and casualisation of jobs in face of rising unemployment, poverty and inequality (Harsh 2001, p.13).

3.2 Accelerated and Shared Growth Initiative of South Africa (Asgisa) and Joint Initiative for Priority Skills Acquisition (Jipsa)

It is probably unfortunate that, although the macroeconomic strategy of GEAR was conceptualise and implemented during the era of Mandela (Mbeki was only the Deputy President at the time), its fruit could only be realised under the Mbeki's administration.   In an attempt to revitalise GEAR, the Mbeki government adopted the Accelerated and Shared Growth Initiative of South Africa (Asgisa) and Joint Initiative for Priority Skills Acquisition (Jipsa) in 2006. According to the then State President, Mbeki (2003), Asgisa was only to *"consist of a limited set of interventions that are intended to serve as catalysts to accelerated and shared growth and development"*. Asgisa and Jipsa were therefore not meant to replace GEAR. They were meant to augment the shortfalls of GEAR – to bring in the elements of job creation and poverty reduction which were missing in GEAR. Asgisa and Jipsa relied very much on the concept of the expanded public works programme (EPWP), which came into being in 2003 to address unemployment and poverty (Mbeki 2003). The successes of EPWP have still not been properly quantified. However, there is no doubt that the

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[92] Though not a macroeconomic policy, the RDP was introduced in 1994 at independence. It was hailed as being more relevant to South African conditions than GEAR. The RDP was specifically designed to address the conditions created by colonialism and settler-colonialism and it gave South Africa the character of a more activist state than the liberal one under GEAR. The RDP was discontinued because it required too much fiscal expenditure. There has since been debate about existence of the RDP with government officials periodically referring to it whenever they address the poor.

EPWP provides many with much needed jobs, although these are mainly of short duration and nothing more than safety-nets against destitution.

When first introduced, Asgisa aimed at economic growth through investment in the country's infrastructure. It further identified specific economic sectors to accelerate growth. These sectors were tourism, bio-fuels, chemicals, agriculture and agro-processing, creative sector, clothing and textiles, metals and metallurgy. Realising that these sectors have always suffered from a huge skills shortage, the Mbeki government created the Jipsa, which aimed to increase and improve especially the scientific skills - as noted by Rodney above - of the South African people (Mbeki 2006). The realisation was that, without relevant technical skills, it was going to be very difficult to position the country on its path to economic growth as envisaged in the GEAR macroeconomic strategy. Mbeki (2006) announced that:

> … together with our social partners, we have agreed to a vigorous and wide-ranging skills development and acquisition programme to meet any shortfalls we may experience. Among other things, we have already agreed to establish within a few weeks a multi-stakeholder working group, JIPSA, the Joint Initiative on Priority Skills Acquisition, through which government, business, labour and civil society will act jointly to respond to the skills challenge in as practical a manner as possible...

In the fifty-second (52nd) 2007 African National Congress' (ANC) national elective congress in Polokwane, Mbeki was unseated by Zuma as the leader of the Party. In the following year he was 'recalled' from the national parliament as president of the country and replaced by Motlanthe who acted until Zuma was officially inaugurated as State President. The ignominious end the Mbeki era meant that his efforts at economic growth were to receive very little (if any) acknowledgement in the new administration.

4. The New Growth Path

The new political administration of Jacob Zuma came in promising better development policies to address the challenges of poverty, inequality and unemployment in a more vigorous manner. The tripartite alliance (ANC-Cosatu-SACP) also called for renewed efforts to target the poor rather than focusing on growth. Consequently, in November 2009, Zuma announced the New Growth Path (NGP). The NGP is better positioned as part of the post-Washington Consensus, which recognises the state as an active player in development (Őnis 2003, pp1-2), something that the tripartite alliance constantly complained about under the GEAR strategy. To better understand the NGP, it is important to first understand the key document – the Industrial Policy Action Plan (IPAP), 2010 - on which it is based.

IPAP is more critical because it outlines all the elements of the NGP Framework. IPAP identifies the problem as structural imbalances in the current growth path and the 2008/09 economic crisis.

From there it outlines the Key Action Programmes (KAPs) and the Areas of Focus (which refer to various economic sectors). The KAPs also identify the key milestones required, the leading government departments, and existing opportunities and constraints. To this end, IPAP identifies eleven (11) economic sectors where jobs are possible, namely green and energy-saving industries; agro-processing; automotives; clothing and textiles; bio-fuels; forestry; timber, paper, pulp and furniture; cultural industries (crafts, film and music); tourism; business process outsourcing, advanced manufacturing, and plastics, pharmaceuticals and chemicals.

The NGP framework is therefore a summary, in effect, of a number of policies that aim to help the economy grow in order to achieve developmental goals of reducing poverty, unemployment and inequality. In particular, the NGP aims to improve innovation and new enterprise development, improve currency competitiveness, reduce balance-of-trade deficit and reduce bottlenecks and backlogs in skills, energy infrastructure and logistics. Accordingly, the NGP is aimed at creating a sustained economic growth that is able to reduce poverty by raising incomes. To this end, the policy aims to achieve a target of five million jobs over a period of ten years in infrastructure development and housing, agriculture and agro-processing, mining, manufacturing, tourism, green economy, knowledge economy and social economy, as well as health, education policing and regional integration.

One major criticism that the NGP faces is that it fails to identify the root cause(s) of the unemployment problem (Vollgraaff 2011, p.3). The policy does identify lack of necessary skills, education and training as causes, but it fails to explain, as provided in this paper, for example, why the economy faces these shortages in the first place. In terms of the New Growth theory, an economy requires technical skills in order to grow, even if it means trickle-down growth. Given South Africa's past administrations of job reservation and the provision of inferior education to the majority of its citizens, it is unsurprising that the economy has suffered enormously in terms of skills that are crucial for growth and development. Leading industrial countries, such as Japan, the USA and some European countries show that technological development is the new engine for macroeconomic growth.

4.1 The New Growth Theory

The New Growth theory assumes that skilled labour is critical and central to economic growth and to this effect accumulation of knowledge ensures the effectiveness of labour (Romer 2001, p. 98 and 99). Accordingly, the effectiveness of labour is evidenced through increased output, a growing research and development (R&D) sector in universities and other state sponsored institutions, and in the private business sector. Such research produces both highly abstract and extremely relevant knowledge, both of which are essential for economic growth.

The South African economic policy of the NGP places strong emphasis on the importance of technology as the driver of economic growth without making any mention of it being based on this theory. However, the emphasis on innovation and skills development is a clear indicator of the fact that the country's new economic policymakers are heavily reliant on this theory. The policy calls

upon more emphasis being placed on training and education, innovation, research and development. These elements are also the key tenets of the New Growth theory (Romer 2001, pp. 98-167).

In line with the New Growth theory, South Africa is very much re-assessing the flexibility of its labour laws. Business has been complaining for some time now that the country's labour laws are too stringent, protective of labour and that these need to be loosened if the economy is to function at its best. This call has been repeatedly rejected by Cosatu, the country's biggest labour federation. Also, note that the Southern African Clothing and Textile Workers Union (SACTWU), one of Cosatu's labour affiliates, entered into a labour agreement with employers to pay lower wages (30% in urban areas and 20% in rural areas lower than existing wages) at entry level for workers in the textile industries as part of efforts to revitalise the country's clothing manufacturing sector (Vollgraaff 2011, p. 3 and Minford and Peel 2002, p. 236).

The business sector has hailed the agreement as a major milestone between labour and business and it is hoped that this measure will help facilitate employment for first time entrants in the labour market and help to expand job opportunities. This practice fits well with the unemployment theory of contracting models, under which a firm may wish to lower wages for the workers, but is restrained by stated or unstated conditions of employment (Romer 2001, p. 432-436). This unemployment theory differs from the efficiency wage theory, which states that there are benefits and costs to paying lower wages. This theory, while not opposed to firms paying lower wages, warns that paying lower wages can harm the firm's profitability and the potential for economic growth (Romer 2001, pp. 412-417).

4.2 The Balanced Growth Theory

From the NGP, it appears that the determinants of growth are understood to be: (1) technology, (2) capital intensity, and (3) institutional policies. With regards to technology, the balanced growth theory is no different from the new growth theory. Technology is seen as having something of the effect of a multiplier, whereby labour's value is multiplied in the production process. It is this process that makes individual firms profitable and that enables these firms to contribute to the country's economic growth.

Capital intensity refers to the stock of machines, equipment and buildings that are available to ensure that production happens (DeLong 2001). DeLong argues that possession of technology without the necessary machines and so forth is not useful. This point is not difficult to see if we consider, for example, Malawian medical doctors who are trained in Europe. Their training involves the latest state-of-the-art technology. However, back home this technology – equipments, machines and buildings – are absent. The frustration doctors face of having knowledge that cannot be applied at home 'forces' them to leave the country and work in countries that can provide the necessary capital intensity. Finally, institutional policies such as minimum wages, land reform, employment conditions must as a matter of fact be supportive of a country's macroeconomic growth policy. If, for example, labour becomes more expensive than its technological worth, profitability drops. It is

therefore imperative to have in place policies that are good and relevant if desired growth is to happen.

Under the NGP, the South African government takes the view that growth needs to happen in all industries at the same time if the country is to achieve its development needs. To this end, technical skills are required. Development is seen as expansion of markets, production and agriculture, with the emphasis on capital investment. Each economic sector serves as a market for the other, and may serve as a source for the other's need for growth. In this regard, the balanced growth theory emphasises the need for investment planning by governments. The NGP's intention to grow and develop rural economies is characteristic of the balanced growth theory. The importance of rural development is clear in that the NGP emphasises land reform and the balanced growth theory sees land and the existence of property rights as the baseline for economic growth (Romer 2001, p. 17).

5. NGP versus GEAR

While the goals of macroeconomic policies are always high employment, price stability, growth and sustainability (Williamson 2005, p. 33; Prachowny 1994, pp. 5-31), development theories can be mainly be categorised into three groups: modernisation theories, dependency theories and systems theories, and development policies lean wholly or partially towards each of these theories. However, the tendency in South Africa has been to avoid basing a policy solely on any single theory. What is characteristic of GEAR and NGP as South Africa's economic policies is that they are both neo-liberal and they are based on modernisation theories which advocate growth before distribution. Modernisation postulates that the causes of underdevelopment are illiteracy, a traditional agrarian structure, traditional attitudes of populations, low division of labour, and a lack of communication and infrastructure. The proponents of modernisation, therefore, regard change as the strategy for development. Modernisation theories give little consideration to the colonial machinery which ensured that the economies of colonised territories served the interests of the metropolitan countries and not the colonised (i.e. as sources of labour, raw materials and markets).

Notwithstanding this, NGP can be considered as being conscious of the colonial machinery, although it says very little about decolonisation of the economy. The colonial experience is only mentioned when the policy refers to rural development (South Africa 2011). Unlike other formerly colonised states (e.g. Indonesia), which explicitly made economic decolonisation their objective, in South Africa reference is made to economic democratisation, black economic empowerment and affirmative action. These three concepts can be regarded as synonymous with concepts such as indigenisation or nationalisation because they all essentially mean that the indigenous peoples must have a stake in the economy. The difference is the extent to which locals get to have a stake in the economy and the means used to achieve such objectives. To this end, the view considered here is that indigenisation and nationalisation represent the 'extremist' approach, while black economic empowerment and affirmative action represent the 'soft' approach to correcting colonial economic exclusions. As opposed to GEAR, the NGP further makes a shift from the ANC's philosophy that "the land belongs to all who live in it" (as stated in the Kliptown Freedom Charter of 1955). This

represents a significant political paradigm within the ruling party. The Freedom Charter actually 'refused' to see South Africa as being colonised. The Green Paper on Land Reform (South Africa 2011) explicitly states that "all anti-colonial struggles are, at the core, about two things: repossession of land lost through force or deceit; and, restoring the centrality of indigenous culture". The government also recognises "...the centrality of land ... as a fundamental element in the resolution of race, gender and class contradictions in South Africa..." This point is in recognition of the fact that land reform in South Africa has been disappointing and has failed dispossessed populations, thus forcing the government to consider reviewing the 'willing buyer-willing seller' clause. It is therefore arguable that the South African government is intent on putting in place policies that are relevant as dictated by the balanced growth theory.

6.   Financing economic growth and development

South Africa's democratic governments (since 1994) have ensured that poverty reduction remains at the core of their policies. However, development (or growth) requires money to set it in motion. While the NGP of the South African government is clear on what it hopes to achieve, what is unclear are the means to realise the objectives of the policy. In this regard, the government has a few options: foreign direct investment, taxation or borrowing (both internally and externally). But, again, what are the limits on government using these tools? To a large extent, in the South African situation, the limits will be dictated by the preferences of government and electors more than the demands of the economy - that is, if all parties act rationally as posited by Minford and Peel (2002, p. 212). The government's rationality is mainly motivated by the desire to win the next election and the government is more concerned about its popularity). In this case, any government that ignores the previously disadvantaged in South Africa is unlikely to enjoy popular support. As indicated earlier, unemployment (for example) affects the black majority in South Africa, and it is that section of the population that has the power to determine who stays in government. In other words, rationality on the part of the voters is limited to seeing government tackle unemployment rather than anything else (*ibid, p.* 218).

6.1   Foreign direct investment (FDI)

For an economy that aspires to be knowledge and technologically-based, such as South Africa's, foreign direct investment presents an opportunity to grow and develop. FDI is one of the cheaper ways of acquiring technology. Multi-national corporations (MNCs) investing in developing countries bring with them their know-how. Their knowledge and skills are transferred to local populations. Other forms of technology transfer include licensing and company take-overs. (Minford and Peel 2002, p. 240 and Cheru 2010, p. 204). The various G8 summits (where South Africa is always well represented), for example, show great interest in investing in South Africa and the continent generally. In fact, according to Ratha, Mohapatra and Plaza (2008, pp. 301-340), South Africa is a relatively preferred destination for FDI in the sub-Saharan region.

However, FDI is not as simple as one might think; it is not just a case of businesses   coming to South Africa in order to invest in the country. In fact, FDI is a highly political exercise that has as

much potential to impact on a country's sovereignty as it can impact on unemployment reduction. Foreign investors are known to come to developing countries with conditions attached. They 'dictate' labour laws, 'demand' holiday taxes and choose where to invest. These factors may have real consequences for the host country, and these conditions are such that the foreign investment may have no effect on reducing unemployment. Instead, these conditions could well lead to further unemployment and the further casualisation of labour. A case in point is Walmart (a USA retail giant) which has come to invest in South Africa and which is already taking over some retailers. The labour movement is up in arms in opposing these takeovers and demanding that the USA giant concede to specific demands including: not retrenching workers, closing the apartheid wage gap, converting casual workers to full employment, local procurement, and adhering to local labour laws. The labour movement's demands were based on the information that the giant retailer was a labour 'basher' in the USA and all other countries where it had interests. To this effect, Cheru (2010, p. 196) warns postcolonial countries against adopting neoliberal globalisation as a development strategy.

Adefuye (2007, p. 149-151) points out that, in many instances, foreign investment shies away from corrupt countries. In those countries, government officials collude with some foreign companies in buying military hardware and building huge stadia at the expense of basic social services. Politics gets to influence court decisions as judicial officers and politicians collude against state assets. To this effect, some rich countries have passed laws forbidding the entry of corrupt politicians in those countries. Increasing numbers of developed countries are rectifying the UN Convention Against Corruption. As the reader knows, South Africa is constantly in the news with her corrupt public officials, some of whom get jailed, some dismissed and others simply suspended – on full pay. The South African government, however, well understands that corruption is an impediment to foreign investment.

6.2 Taxation

South Africa has a variety of tax regimes from which the government can draw to finance development. These tax regimes vary from personal, company, estate duty, capital gains, value added to fuel taxes. All other things being equal, South Africa is therefore better positioned to address the key underdevelopment challenges of poverty, inequality and unemployment. However, Williamson (2005, p. 37) explains that, while it is agreed that public expenditures are needed, this should not be done in such a way that it distorts prices as a result of high marginal taxes. Williamson argues that even the use of value added tax (VAT) – which is also used in South Africa – can have negative effects if it is used excessively. Logren and Diaz-Bonilla (2008, p. 291) also posit that tax increases may slow economic growth; as such, taxes have a negative impact on individual disposal incomes and thus on savings and investments. Added to these arguments is the fact that the majority of the adult South African population is either underpaid, unemployed, incapacitated or aged and therefore exempt from other kinds of taxation.

Consequently, given the smallness of the tax base, South Africa is likely to encounter some resistance if the authorities try to finance the new economic policy through more taxation. Indeed, there is a widespread belief that South African taxpayers are already overtaxed. An additional tax could have negative perceptions in spite of the fact that, under normal circumstances, the taxpayer

may not refuse to pay his or her taxes. However, the Minister of Finance (2011), Gordhan, has assured South Africans that taxation will be judicious and that "these Bills contain many fiscal measures that seek to facilitate growth by alleviating the burden on ordinary working citizens and by removing tax blockages that impede legitimate commercial goals".

6.3 Borrowing

Borrowing is another form of financing development. However, borrowing is limited by a number of factors, including global financial patterns. To quote Gordhan (2011) again: "The turmoil may also impact international funding conditions, which are important to South Africa given that we intend to borrow almost R450 billion to fund our fiscal deficit over the medium-term." This money the Minister intends to borrow is in addition to the R76.6 billion (South Africa 2011) the country already owes. In the Minister's words to a question in parliament, Gordhan (2011) answered as follows:

> Rather than a debt ceiling, we have proposed a sustainable debt trajectory... In the 2011 Budget Review net loan debt is forecasted to surpass R1 trillion in 2012/13... we project that debt will stabilise around 40 per cent of GDP in 2015/16... Net loan debt amounts to R859 billion by end June 2011 and is estimated to reach R999billion by the end of March 2012... As at end June 2011, national government's debt portfolio comprises of 91 per cent domestic and 9 percent foreign debt…

Hoping to achieve the objectives of development by constantly rolling over debt could have serious implications for the future generations and could, in fact, ultimately lead to insolvency (Minford and Peel 2002:183). Africa has many examples of instances of limitless borrowing and what this practice has done to those countries. Borrowing by Third World countries, in many instances, leads to dependency and marginalisation (Cheru 2010, p. 196). Africa's 'balance sheet' is effectively managed in the West, with serious implications on various countries' sovereignty as donors call for accountable governance. The latest trend is the use of the Budget Support as development aid, whereby donors make money directly available to treasuries to support individual budgets (Barkan 2009, pp. 67-85; De Renzio 2009, pp. 19-23). Increasingly, promises of more development aid are not honoured by the donors.

Heavy borrowing could also, of course, expose the country to international financial crisis without recourse as happened in the cases of Indonesia, Korea and Thailand in the 1997/8 crisis. According to Arner, Lejot and Wang (2010, pp. 216-217) these countries became vulnerable to the policies of the Washington Consensus as espoused by the USA and the IMF. These countries could not address the crisis to the same extent as the People's Republic of China and Malaysia, both of whom had refused to remove trade and capital barriers and who were thus less affected by depreciating currencies and the withdrawal of international credit. The Asian situation contrasts with that of Latin America where, in the 1980s, economic problems indicated that " at the structural level, there was a clear need to greatly deregulate markets, including the capital markets; reduce protection; and embark on a broad privatization scheme ... seen as necessary to compete internationally and regain growth through exports expansion" (Edwards 1997, pp. 538-539). Edwards' view has since been

known to be the structural adjustment programmes (SAPs) imposed by the IMF, World Bank and the USA on developing countries – with catastrophic results.

6.4   Cutting and redirecting state expenditure

Although the South African government claims that all citizens should at least enjoy the minimum that a human life deserves, through the provision of comprehensive, integrated, sustainable and quality social-development services that address vulnerability and poverty, there should be limits to what the state can be expected to do. The author's opinion is that South Africa can reduce and/or redirect its expenditure. In other words, it can cut expenditure from some areas and redirect these savings to other equally deserving areas. According to the Department of Social Development (South Africa 2008):

> Social-assistance cash grants provide targeted income support to those whose livelihoods are most at risk. The available grants are the old-age, disability, child-support, foster-care, care-dependency and war-veterans' grants, and temporary grant-in-aid relief… More than 2.3 million older persons receive the old-age grant. Expenditure on social security increased from R36.9 billion in 2003/04… to a projected R73 billion in 2009/10, constituting 3.1% of GDP. By March 2008, about R12.4 million (sic) people were receiving social grants. By October 2008, 8.3 million children were receiving the Child-Support Grant. By October 2008, 494 992 children were receiving the Foster-Care Grant… By July 2008, 1.4 million people were receiving the Disability Grant.

From a development perspective, these expenditures have a very significant, positive impact on alleviating poverty. However, at the same time, there are other areas that can be used as sources of development finance. These areas are: child-support grants and housing grants. South Africa pays child-support grants to all children under the age of eighteen years and builds houses for many poor households under the auspices of the RDP. We argue here that, while child-support grants certainly have merit, it cannot be right that a grant is made available without checking the condition of parents. A bodily able parent should be able to take care of his children and not have to look to the state to support his children. Here, the state can save a lot of money and redirect such savings to other deserving areas with a view to fostering development in the country. Equally deserving attention is the housing provided under the 'RDP scheme'. Although there are currently no statistics available, many recipients of this grant can, in fact, afford to provide their own housing. The state can only assist with serviced sites and should let people undertake the construction of their own houses. There is ample evidence that people are capable of building themselves houses as long the basics are provided. Many of the eye-sore squatter camps of yesteryear are evidence, today, that the poor do not always need state patronage. Orange Farm (south of Johannesburg) and Thembisa (north-east of Johannesburg) are examples of areas where people started as squatters and, today, are evidence of the ability of the poor to employ the resources at their disposal effectively. The continued state-funded 'free dispensary' of houses can only be seen as what Minford and Peel (2002, p. 212) above refer to as 'rent-seeking' as the ruling parties try to buy votes from certain constituencies rather than help provide real development. Furthermore, the Minister of Human

Settlement has admitted that providing free houses is something that the country cannot sustain in the long-term and a policy that has to come to an end sooner or later.

The view put forward in this paper is that there are many other areas where cuts can still be made. The resulting savings on expenditure can then be redirected to productive areas of the economy (as referred to in the NGP). The primary purpose should be to get the nation working and not to create conditions of dependency where people start regarding the state as having unlimited resources at its disposal for their unlimited needs. As a developing country, South Africa should place more emphasis on productive earnings than on social welfare if the focus is to be on country's long-term development.

Another area where cuts and redirection of expenditure are possible is in the area of corruption. Corruption does not end when the country's resources end up in certain people's hands: it has serious implications for development, simply because resources meant to improve lives get diverted into the pockets of, usually, wealthy individuals. Lodge (1998, pp. 157-187) paints a picture of South Africa as a country being rampant with, in particular, political corruption. At the time, Lodge pointed out that the democratic government in South Africa was exposed because, compared with the apartheid regime, it was (and is) transparent (note that the apartheid regime was just as corrupt, but lacked transparency). By the close of 2011, at least one province of Limpopo had had four government departments declared bankrupt and placed under state administration. Some state departments in Gauteng and Eastern Cape have also suffered the same fate, because they have failed to deliver on essential services owing to money being diverted into the pockets of corrupt state officials. Although we do not have hard figures to present here, there is no doubt that corruption has cost the state dearly, not only through the stolen funds themselves, but also because of the long court proceedings that these cases involve. Corruption therefore represents a kind of spending that is not easily and quickly detected and results in wasteful expenditure as a result of the activities of dishonest officials.

7. Conclusion

The theoretical basis of the NGP is not very different from that of GEAR. To varying degrees, both policies are based on the growth theories of modernisation. The NGP differs from GEAR only to the extent at which it specifies and quantifies its objectives and envisaged outcomes. Also, the NGP does not make any specific preference between capital and labour, whereas GEAR was pro-capital.

This article has argued that, to happen, development requires money, and a few areas of potential financing have been indicated. While the NGP is eloquent in detailing what it hopes to achieve, there is no indication of where the financial resources would come from. This article has therefore argued that, while the challenges of poverty, inequality and unemployment are real and need addressing, South African policymakers need to seriously consider the financial implications of development programmes to achieve the stated objectives. The article shows that, with the cost of the national debt no less than forty percent of the gross domestic product, South Africa could easily

slide into the debt-trap. Finally, the article has also referred to those areas of expenditure where cuts could be made to finance development (i.e. from South Africa's own resources).

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Ion Mierlus-Mazilu

IGUAL - learning software, pedagogical methodologies and learning materials

Abstract:

The low quality of primary and secondary education in most Latin America countries is a well-known problem. As a response to this reality, the private educational market has been steadily growing in those countries. These private schools, in general, offer a higher quality and personalized education for the students that can afford it. The main selling point of these institutions is access to better resources: better teachers, technologies, materials and pedagogical methods. This difference in education quality creates a problem once students from public schools reach university.

This IGUAL project will generate learning solutions (combination of e-learning software, pedagogical methodologies and learning materials) to facilitate the assimilation of new knowledge and the development of new skills even when the student has deficient background knowledge and/or under-developed required skills. The solutions that this project will provide have the potential to be used by all students in the Latin American

Keywords: education, learning software, pedagogical methodologies, learning materials

JEL classification: I21

Introduction

The IGUAL Project proposes the use of innovative learning technologies to help university students from public schools to bridge the knowledge and skill gap with their private schooled counterparts. This project is being developed by the following partners from Europe Union:

- Tampere University of Applied Sciences (TAMK), Tampere, Finland;
- Universitatea Tehnica de Constructii Bucuresti (UTCB), Bucharest, Romania

and also from Latin America:

- Universidad Autónoma de Aguascalientes (UAA), Aguascalientes, México;
- Universidad de los Andes (UNIANDES), Bogotá, Colombia;
- Escuela Superior Politécnica del Litoral (ESPOL), Guayaquil, Ecuador;
- Universidade Federal do Pampa (UNIPAMPA), Bagé, Brazil;
- Universidad Austral de Chile (UACh), Valdivia, Chile.

Background of research

The low quality of primary and secondary education in most Latin America countries is a well-known problem. As a response to this reality, the private educational market has been steadily growing in those countries. These private schools, in general, offer a higher quality and personalized education for the students that can afford it. The main selling point of these institutions is access to better resources: better teachers, technologies, materials and pedagogical methods. This

difference in education quality creates a problem once students from public schools reach university. The public schooled students have a strong handicap in their performance in a demanding and fast pace environment where professors are more concerned with the delivery of knowledge to large audiences than with catering to the specific needs of each student. This problem is aggravated by the fact that the great majority of public schooled students belong to low-income families. All the problems that arise from this social status in Latin America (need to work at an early age, economical difficulties, etc) also conspire to reduce the probabilities of success of these students. In this light, it is not just understandable, but to be expected, that the private schooled students out-performed their public schooled peers and gain better opportunities at the labour market.

The unequal primary and secondary education system in Latin America contribute to the inflexibility of the social mobility. Students that could afford private primary and secondary education have much better opportunities to have access to high quality universities and to complete successfully their studies. On the other hand, students that due to their socio-economical status only had access to public education have, statistically, a lower chance to enter universities and to obtain a professional degree. This has a negative impact on the competitiveness of Latin American countries, as only the middle- and high-income segments are fully contributing to the pool of specialized workforce while the talent and potential is uniformly distributed among the whole population. While scholarships and subsidized or free higher education could help to overcome the economic problems of low-income students, the lack of an adequate primary and secondary education has not been directly addressed in the region. While improving public basic education is the ideal solution to the problem, changing current educational structures have proved to be a long-term and difficult project for any country.

The main problem to be addressed during this project is the increased level of difficulty that public schooled students confront during their university studies, compared with their private schooled counterparts. This difficulty results in lower performance and a higher level of dropout. The only way to deal with such great individual differences in the students will be to personalise the learning process for each student according to their current status and capabilities. A feasible and scalable alternative to personalise the learning experience of the students is to use learning technologies to create automated solutions to follow the students during their learning process, identify areas or skills that they require but are lacking, recommend them appropriate content from learning material repositories and guide them trough learning paths adapted to their individual needs. This project will generate learning solutions (combination of e-learning software, pedagogical methodologies and learning materials) to facilitate the assimilation of new knowledge and the development of new skills even when the student has deficient background knowledge and/or under-developed required skills. These learning technologies, initially developed in Europe, could be adapted to provide several "helpers" or "automated tutors" for each learner. Even if not perfect when compared with human tutors, these technologies could help disadvantaged students to receive the extra support needed to overcome the gap with their peers.

The solutions that this project will provide have the potential to be used by all students in the Latin American Universities to support their learning process. However, it is expected that the public schooled students will be the main beneficiaries from these innovations, as they will enable those students to overcome the disparity in knowledge and skills with privately schooled students. In the context of the validation studies, at least 2000 students will be directly or indirectly involved in the different Latin American Universities that partner in this project by participating the pilot courses. If the project proves to generate positive results, this experience will be repeated each academic year and expanded to other knowledge areas apart from the pilot. The local companies are also final beneficiaries of this project. They can increase their competitiveness with new well-educated graduated professionals as their employees. Another final beneficiary group is the Latin American countries, as the know-how increases in the companies the competitiveness of the countries also increases.

In order to assure the dissemination and exploitation of the solutions proposed in the project, the Latin American Community of Learning Objects (LACLO) will be used as a way to reach other Latin American higher educational institutions beyond the project participants during and especially after the project. Also, this project is the first collaboration approach between two existing regional networks, Codewitz in Europe and LACLO in Latin America. All the project partners come from these networks. There are several activities such as a joint conference and virtual seminars during the project to create links between the members of both networks. All the project results are made technically compatible to be shared in both networks.

The objective of this project aligns itself with one of the specific objectives of the ALFA III program, namely, to improve the quality, relevance and accessibility of Higher Education in LA, particularly for the most vulnerable groups. If more low-income students successfully finish their studies despite the deficiencies in their basic education, the project will have a direct, positive impact in the accessibility of higher education for a segment of the population (public schooled students) that is usually in a disadvantaged position compared with students that could afford private schools.

This project also supports two of the three ALFA III priorities. First, the adoption of innovative learning technologies to solve current pressing issues will help in the modernization of Latin American HEIs. Moreover, these technologies are aimed to the most disadvantaged group of students and will be implemented in two of the poorest countries in the region. Second, the creation of the solutions will require an intense exchange of ideas, learning materials, tools, methodologies and results in a level not seen before in the region in the area of learning technologies. This collaboration will strengthen existing regional networks, such as LACLO, and will create lasting bonds with European networks, such as Codewitz.

Analysis axes
  ▪ Analysis of State-of-the-Art Solutions for Personalised Learning Support

LA partners, with the help of European partners, explore the state-of-the-art solutions for Personalized Learning Support developed and/or used in Europe. The partners collect and report the technologies used, promising results and good practice. This report will serve as base to select the technologies to be adapted to the Latin American needs and context. Each LA partner will assign at least one researcher to contribute to the report. This activity is conducted in parallel with the Need Analysis. Output will be one state-of-the-art report about European technologies for Personalized Learning Support
  ▪ Data collection for Needs Analysis

In order to determine the specific need of personalization that public schooled students have at the University, all LA partners will apply common questionnaires to their students and professors. Both LA and European partners discuss and approve the questions and the form of the final questionnaires. The overall activity is coordinated by the project coordinator. All LA partner will make necessary translations of the questionnaires and will apply them to their own students and professors. Each LA partner writes a report about their findings from the results of the conducted Need Analysis. Output will be a Questionnaire, results and also a Draft Need Analysis Reports
  ▪ Need Analysis and Needs Analysis Meeting

To unify the view of all the partners about the need analysis, ESPOL will coordinate the on-line discussion and the writing for the final report. To conclude the Need Analysis report, all partners will send a delegate to a meeting and visit to UNIANDES, Colombia. During this meeting the final discussion about the need analysis will take place and an agreement is reached over its content. During this meeting also, the Needs Analysis is contrasted against the State-of-the-Art report to establish the best European learning technologies to be adapted to address the knowledge and skill gap between public and private schooled students through the adequate used of automated personalization. Output will be Recommended Technologies Report

Proposed Solutions

The overall objective of this project is to improve the accessibility of higher education in Latin America for students from public schools. There is a measurable gap between the quality of education between private and public schools in most Latin American countries. This gap has an immediate impact on the level of accessibility to higher education for each one of those groups. Students that come from the public schools have a lower probability to enter higher education institutions and also an even lower probability to finish successfully their studies. While there are several factors that are responsible for these results (need to work while studying, lower expectations), the knowledge and skill gap between private- and public-educated students is a key problem that aggravates the others. This project will propose innovative, contextualised solutions, based on proved learning technologies, to help students with a public school background to rapidly close the gap and compensate for handicaps in their basic education.

The specific objective of this project is to create and validate innovative and contextualised solutions to reduce the knowledge and skill gap between private- and public-educated students. These solutions will help the student to acquire new knowledge and skills, providing individually directed support based on the particular background and profile of the student. The personalised learning solutions will early detect problems with the students' knowledge and skill background, suggest students to review topics that were not being well covered in their basic studies and to recommend the student with activities to improve the level of their under-developed skills. Students with the public school background can use these tools to cope with deficiencies in their previous studies and to be up to par with their peers from private schools. The effectiveness, efficiency of the different solutions, as well as their positive impact in the students from public schools, will be evaluated and validated through their concurrent application and evaluation in all Latin American institutions that partner for this project. The application area will be introductory computer programming, where the gap between public and private basic education is the widest due to the limited access to technological resources in public schools.

The Latin American partners tackle the common problem of accessibility of the university studies concretely by delivering 6 learning solutions. The solutions put all their emphasis on enabling easier learning process for those students who have weaker background to catch up with the basic level of knowledge required in the university studies. These solutions would help to reduce the knowledge and skill gap between public and private schooled students. The solutions to be developed during the project are:

- Adaptive Learning Materials, which provides a methodology and tools for the easy creation of content that adapts to the student's specific needs. For example language, learning style, way to access the material, etc. This solution will be coordinated by UNIPAMPA, with the support of UAA, UNIANDES and TUCEB.
- Problem Solving Protocols which provides a way to adapt not only the content, but the process needed to solve a problem, depending of the mental models of each student. This solution will be coordinated by UAA, with the support of UNIPAMPA, ESPOL and TUCEB
- Adaptive Learning Design is a solution providing a methodology and tools for the creation of learning paths and designs in a way that enable the automatic adaptation to the students background knowledge and skills. This solution will be coordinated by UACH, with the support of UNIANDES, UNIPAMPA and TAMK.
- Social Sharing and Recommendation of Learning Materials is a solution for integrating familiar social media features into the process of sharing and recommending learning materials. This solution serves also as the main valorisation channel as all produced solutions and learning materials are distributed freely as open source through the platform. This solution will be coordinated by ESPOL, with the support of UACH, UAA and TAMK.
- Evolving Adaptive Framework this solution will provide the students an integrated and personalized way to access and use the other solutions created in this project. This solution will be coordinated by UNIANDES, with the support of UACH, ESPOL and TUCEB.

Results

- Design and Implementation of Innovative Learning Solutions

Given that several groups will work in parallel to develop different solutions, a set of technical standards will be set to ensure the interoperability of the different solutions. The topics to be agreed during those discussions are for example learning material metadata standards (Dublin core or LOM etc.), packaging standards (SCORM or IMS or LAMS etc.) and communication standards (SQI or OAI-PMH etc.). All partners participate in the discussion and the task coordinators will publish a final document. The use of appropriate standards ensures the maximum exploitability of the solutions. All partners will follow the agreed standards that will be included in the quality plan document.

- Designs and Implementation Plan for the Learning Solutions

Different solutions based on learning technologies will be proposed as ways to reduce the gap between private and public-schooled students in Latin American Universities. These solutions will exploit the research conducted in several areas of learning technologies in Europe and Worldwide. Each solution will be designed and implemented by development teams. The first partner in the development team coordinates the work. The tentative solutions, pending confirmation by the need analysis, are the following:

- Adaptive Learning Materials

Adaptive Learning Materials, which provides a methodology and tools for the easy creation of content that adapts to the student's specific needs. The development team enables and produces adaptation to 100 learning materials.

- Problem Solving Protocols

Problem Solving Protocols, which provides a way to adapt not only the content, but the process, needed solve a problem, depending of the mental models of each student. For the pilot courses the development team will produce 40 problem protocols.

- Adaptive Learning Design

Adaptive Learning Design is a solution providing a methodology and tools for the creation of learning paths and designs in a way that enable the automatic adaptation to the students background knowledge and skills. The development team produces accordingly 60 learning designs for the use in the pilot courses.

- Social Sharing and Recommendation of Learning Materials

Social Sharing and Recommendation of Learning Materials is a solution for integrating familiar social media features into the process of sharing and recommend learning materials. This solution serves also as the main valorization channel as all produced solutions and learning materials are distributed freely as open source through the platform.

- Evolving Adaptive Framework

Evolving Adaptive Framework this solution will provide the students an integrated and personalized way to access and use the other solutions created in this project.

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Robert McElvaine

"Let's Try It Again!"– Unlearning the Lessons of the Great Depression

Abstract:

The reasons for the economic collapses of 1929 and 2008 were similar: people who see the Market as God and insist that a totally free market, with no interference from government, is the only way to achieve prosperity pursued policies in the years preceding both crashes that allowed greed to rule and income to become heavily concentrated at the highest levels, leaving too little in the hands of most people to consume all that was being produced. In both cases, credit was used to allow people with insufficient income to continue to buy, keeping the economy rising, but in the end making the disaster worse. The breakdown of the world economy after 1929 discredited faith in Marketism for a half century. In the United States in the middle decades of the twentieth century, the top-heavy distribution of income eased considerably and widespread prosperity reigned. Beginning around 1980, however, the lessons of the Great Depression were unlearned, resulting in the re-creation of the conditions of the 1920 slow tax rates on the rich, weak labor unions, concentration of income at the very top and lax regulation that had produced the disaster of the 1930s. The share of income in the United States going to the hyper-rich rose steadily and by 2007-08 exceeded the peak it had reached in 1928-29. Yet even after the collapse in 2008, right-wing politicians and economists continued to insist that the policies that had twice failed disastrously should be implemented again. The conservative arguments after both crashes called for spending freezes, austerity. and tax cuts and condemned as socialism any proposals for government intervention. The prescription of the Marketists in the face of the failure of their policies is to keep following the regimen that produced the sickness. While the pragmatic Franklin Roosevelt called for bold, persistent experimentation, the ideologue Herbert Hoover demanded bold persistence. But capitalism and government intervention aren´t an either/or choice. No one pretends that democracy is perfect or all-wise, Winston Churchill noted. Democracy, he continued, is the worst form of government except all the others that have been tried. The same can be said of capitalism: No one should pretend that capitalism is perfect or all-wise. Yet those who worship the Market as God pretend just that. Capitalism is the worst economic systém except for all the others that have been tried. The Founding Fathers of the United States well recognized the flaws in democracy, so they created a form of government based upon democracy, but with a system of political checks and balances to make it work properly and lessen those dangers. We need to realize now that capitalism is the least-bad economic system but, like democracy, it contains within it many inherent dangers. We need an economy that is basically capitalist, but with a system of economic checks and balances to lessen those dangers. To paraphrase a song from Mary Poppins: Just a spoonful of socialism helps the capitalism go up.

Nilüfer Narli

EU Harmonisation Reforms Transforming the Turkish Civil – Military Model and Its Cultural Pillars

Abstract
The EU harmonization process, starting in 2001 when the liberal political and economic ideas and changes in the composition of the elite created challenges to the social and political structures, transformed Turkey's structures, political institutions and political culture by a series of reforms throughout the 2000s. Turkey experienced a radical departure from the guardianship model where there was a dominance of the military as an institutional actor in the political system, sustained by means of prerogatives that were accepted b y the political elite and the society. This dominance was occasionally maintained by the use of physical coercion, but mostly by the politico cultural/ideological militarism, which permeated in varying degrees several realms of life, from schooling to civil society activities.
To what extend this departure does align the Turkish civil-military relations with the EU political norms and practices? The conceptual model, designed to analyze the impact of the EU-harmonization process on the military's autonomy and the cultural pillars sustaining it, is based on an assumption that the EU harmonization is the major independent variable. It is not treated as a deterministic variable, but a process affecting the institutional changes as well as the changes in the military related political culture that comprises the Turkish security and strategic cultures.
The relatively fragile consensus that sustained the guardianship type of civil-military concordance model has eroded under the EU harmonization, as the military lost its prerogatives and the broader military related political culture has changed in that the idea of the coup or any type of military intervention in civilian politics is not supported any more. What is desired is larger civilian voice in security matters. A new security and strategic cultural climate has been evolving in Turkey where citizens do not any more perceive the military as a privileged and untouchable institution. This process is not free from friction.

Key words: civil-military, society, politics, Turkey, EU harmonization)

1.   Introduction

The EU harmonization reforms, enhanced with the liberal political and economic ideas of the 2000s and the changes in social class compositions transformed Turkey's structures, political institutions and its political culture. Turkey experienced a radical departure from a political system, where there had been a dominance of the military as a state actor, sustained by a civil-military alliance or coalition and by the institutionalized control/influence mechanisms and occasional use of physical coercion and politico cultural/ideological militarism, which permeated in varying degrees several realms of life, from schooling to civil society activities.

Analyzing a civil-military alliance that justifies the military's political role and institutionalized power in the name of protecting the state requires to move from Rebecca L. Schiff's concordance theory (Schiff, 2009) that analyzes the dynamics amongst three actors, military, civilian political

decision making and society; Luckham's "covert guardianship model"[93]; and Stephan's[94] model of military prerogatives. Moving from these theories, the paper examines the establishment and de-establishment of the military prerogatives by analyzing the changes in the relationship between the Turkish military, civilian politics and society before and after the EU harmonization process, which is the major change leading process in the study. It is not treated as a deterministic variable, but a process affecting the institutional changes as well as the changes in the military related political culture.[95]

The Turkish civil-military coalition, which was not free from challenges, as Turkey experienced three major coups (1960, 1971, and 1980) and a soft coup in 1997), was significant in tolerating the military's autonomy. Its autonomy was partly contingent upon economic policies and the elite homogeneity as well as the political culture of consenting the military's role as a protector and at the same time seeing it as an integral part of the society. This is why the paper examines the political culture and the social and political processes associated with the military and civilian political elites forming an imperfect concordance or a coalition, a process starting in the 1960s and ending in the 2000s: "civilians share the rule with the military". Then, the paper moves to the last-one decade changes in the Turkish military's autonomy and prerogatives by analyzing the impact of the EU Harmonization process and its influence on:

• the military prerogatives, that is the formal control and influence of mechanisms of the military on civilian politics; and
• the changes in the cultural pillars that sustained civil-military coalition and the military prerogatives

Next to this analysis, the paper looks at areas where the remaining prerogatives are pending despite the increased civilian oversights and de-militarization of the institutions.

2. Evolvement of a Civil-Military Coalition and Military Prerogatives in Turkish Political Context

Inheriting the Ottoman legacy of strong state-weak society tradition that sustained the weakness of the bourgeoisie vis-à-vis the state elites in Turkey in the first decades of the republic [96], the military, which played a pre-dominant role in the foundation of the Turkish republic, gained a key role in politics. It also assumed responsibility in the modernization[97]of the political system and exercised informal political influence on the modernization. These were the reasons that partly explain how the Turkish military established itself as an autonomous institution, having institutionalized political power in a political context that inherited a less egalitarian and hierarchical society, the legacy of Ottoman Empire.[98] It was in such a political context where the state's hierarchical, authoritarian,

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[93] Luckham defines "covert guardianship" model: "More indirect still, the military may act in such a way as to support over the long run a political order that it considers capable of following the national interest and providing with adequate support in the pursuit of national security. The military may submerge itself politically for a considerable time and yet retain the capacity for direct political action when so required,..". (Luckham, 1971: p.29).

[94] Stepan, in his model of military prerogatives, defines military institutional prerogatives as what "military as an institution assumes"; that is, "acquired rights or privilege, formal and informal, to exercise effective control over its internal governance, to play a role within the state apparatus or even to structure relationship between the state and civil society". (Stephan, 1998: 94-95).

[95] In the context of the paper, security and strategic cultures, which are treated as integral part of the military related political culture, are products of national as well as international real politics; they are also the products collective memory related to national security, remembered systematically and learned. Turkish security culture, which does not only refer to elite's culture, is the totality of the security related memories, ideas, values, beliefs, perceptions, emotions and opinions shared by the security elite and the society at large.

[96] On the marginality of bourgeoisie vis-à-vis the state elites and the power of the state in Turkey, see Metin Heper (1985;1992) and Keyder, 1989).

[97] Belge (2011) studied the modernization of Turkey under military control and influence. His book titled "Militarist Modernleşme…." , discusses the effects of the military on the modernization processes in Turkey, Germany and Japan.

[98] On the Ottoman Empire and its hierarchical, bureaucratic-patrimonial structure until its last days in the late 1800s, see Mardin (1969).

"corporatist" (Parla and Davison, 2004) and elitist core, which supported the military-bureaucratic alliance, was maintained until the late 1980s when liberal economic model, adopted by the ruling Motherland Party (1983-1991), began to produce changes in the structures and political ideas.

Since from the foundation of the republic, the civil bureaucracy linked to the center, composed of the military and senior bureaucrats, formed an alliance with the business elite, created by the state in the early years of the republic. The center's tolerance of the military's autonomy was partly contingent upon the policy of statism that was functional in maintaining the high degree of homogeneity among the military and civil bureaucracy as well as the business elite until the 1980s. The military and elite alliance was enhanced by the middle class elements in the composition of the officer corps. In the early days of the Turkish republic (1923-1950), officer corps came from various social classes, yet regardless of the social background of a cadet, his education and socialization transformed him to be a member of a modern urban middle class.[99] In the later years, the officer corps gained more and more middle class characteristics. Almost half of them came from military and civil servant families in 1960-1980[100] without excluding the rural background that formed 49 percent of the cadets in 1983, shown by Brown (1998).

Added to the integration of the middle class elements to the military, the high ranking officer corps, either collectively or as individuals, gradually penetrated various institutional fields, such as economic enterprises (e.g., Armed Forces Mutual Assistance Foundation or OYAK- *Ordu Yardımlasma Kurumu*)[101], and the institutions of education and training of civilian manpower (e.g., military representatives in the oversight boards, see above). Various forms of the Turkish military's penetration into the civilian institutions and into the capitalist economy and its consequent fulfillment of civilian administrative functions in the 1970s and 1980s, and its engagement in different forms of power politics, enhanced the role expansion of the military and strengthened the civil-military class alliance.

The civil-military alliance's support of the military's autonomy was not only sustained by socio-economic processes but also by cultural pillars that were the major civil-military related convictions, perceptions and fears, which were internalized in the course of primary and secondary socialization. Amongst the beliefs and major convictions, "every Turk is a born soldier" and "Turkish nation is the military nation" express the patterns of heroism, readiness to sacrifice, and a sense of sub-ordination. The belief that "being a martyr is the heist level of exaltation" also fortifies the patterns of heroism. Added to these militarist convictions, traditional deference to the military and the belief that "the military protects us against the internal and external enemies" made the military a type of sacred and unquestionable institution.

3.   Curtailing Military's Autonomy, Institutional and Societal Mechanisms

The analysis of the process of curbing military's autonomy and its formal influence mechanisms with the EU harmonization reforms, employs Alfred C. Stepan's model of selected prerogatives of military as an institution in democratic regimes: "constitutionally sanctioned

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[99] On the integration of officer corps into the middle class, Birand wrote: "once the ceremonies are over, a gigantic piece of machinery goes into action...and transforms him [the cadet] into a totally different person". (Mehmet Ali Birand, 1991: 26).

[100] Brown's study shows the distribution of the middle class in the composition of the officer corps of the 1960-1980. It shows that the 22.2 percent of the military cadets (20.5 percent of the army, 26.1 percent of the navy and 19.9 percent of the air force) were sons of officers and 22.4 percent (17.9 percent of the army, 29.4 percent of the navy and 19.9 percent of the air force) were sons of civil servants. An important proportion that was "37.7 per cent of Army cadets and 28.9 per cent of Air Force cadets were from the lower socio-economic strata". (Brown, 1989: p.399; Table 8; and p.398).

[101] OYAK was established on 3 January 1961, following the 1960 coup, with a special law (no. 205) that was adopted in 1961 by the government of the military power organized in the Committee of National Unity (MBK). Oyak had privileges, such as exemption from corporation tax; added to others: "all the revenues of the fund are exempt from turnover tax *(gider vergisi)*, the collection of the members' fees is exempt from income tax, all the transactions of the fund is exempt from the state stamp tax, all the donations for the fund are exempt from income tax and from inheritance and transition taxes (article 35), and disbursements to members are not taxed". (Akça, 2006: 315).

independent role of the military in political system", "military relationship to chief executive", "coordination of the defense sector ","the role in intelligence", "the role in internal security"[102], "the role in military promotions" (Stephan, 1998: 93), the role in education, added by the author; and "the role of the military in judiciary and the military personnel facing judgment by civilian courts" (Zaverucha, 1993).[103]

1 "Constitutionally sanctioned independent role of the military in political system."

Having constitutionally shrined prerogatives and highly centralized organizational structure and autonomy (Cizre-Sakallıoğlu, 1997; Bayramoğlu, 2006)[104], the pre-EU harmonization military, guarding the state and the society, had prerogatives to exert power over the legislative and executive branches, by means of several laws and constitutional articles. Among them, the 1997 EMASYA protocol, which was abolished in February 2010, was found to be the major institutional tool of the military to stage coups, to have autonomy during the civil unrest and to carry out operations without the consent of civilian authorities. Another one is Turkish Armed Forces Internal Service Law (*Law No. 211, Article 35,* passed on 4 January 1961) that entrusts the military to guard and to defend the Turkish Republic as defined by the constitution of 1961 and the 1982 constitution. It has not been amended yet despite the demand of the opposition.[105]

The pre-EU harmonization military was operating via constitutionally established National Security Council (NSC or MGK in Turkish), established after the 1960 coup and acquired more formal power with the post-1980 coup constitutional arrangements. The EU harmonization reforms changed both the function and the composition of the NSC by removing the force commanders from the NSC and by confining its function to the debate of the security issues rather than the domestic political issues. The only remaining permanent military member of the NSC is the Chief of General Staff. Curbing the military's power in legislation, Article 118, abolished by the EU harmonization reform, had been one of the military's institutionalized abilities that enabled the NSC to make recommendations to the Cabinet, which were as powerful as decrees. The military helped carry them out via the military dominated National Security Council General Secretariat (SGNSC), whose members had seats in parliamentary and budgetary commissions and the SGNSC used to manage the Council's affairs in monthly meetings, which were called by the President in consultation with the Chief of General Staff. The 7th Harmonization package (7 August 2003), amendments to the Law on the National Security Council (Law No: 2945, 1983) and several related reforms[106] all abolished the legally sanctioned role of the military in the executive branch. Also abolished by the EU harmonization reforms, one of the other set of constitutionally sanctioned military prerogatives, which gave them power to influence the civilian decision making, was having representatives in the oversight boards, including Higher Institution Council and High Audio-Visual Board (RTÜK).

The analysis of the constitutionally independent role of the military and any change in this requires analyzing (I) the parliamentary oversight over defense policy formation; (parliamentary oversight of the defense budget; and (iii) the level of mandate of a court of auditors to inspect the military

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[102] In Stephan's (Stephan, 1998) model, it is the "military's role in police", but the author prefers the phrase , "military's role in internal security", as it better fits the Turkish political context.

[103] According to Jorge Zaverucha, one of the military prerogatives, which provides autonomy to the military, is "military personnel unlikely to face judgment by civilian courts." (Zaverucha, 1993).

[104] Cizre-Sakallıoğlu (1997) and Bayramoğlu (2006) explains the political context and prerogatives of Turkish military's autonomy.

[105] The opposition party, People's Republican Party (CHP), demanded its amendment in December 2010) without any success.

[106] These reforms included: re-defining the functions of the NSC in an amendment to Article 4; and abrogating articles 9 and 14 of the Law on the NSC and the NSC Secretariat General which empowered the Secretariat General to follow up, on behalf of the President and the prime minister, the implementation of any recommendation made by the NSC. See (Narli, 2009).

expenses. Compared to the pre-EU harmonization era when the defense policies were solely defined by the military almost since the foundation of the republic in 1923[107], the EU harmonization era has seen an increased the inclusion of civilian parliamentary input in and oversight on the formulation of national defense policies since the late 2000s. To insure the civilian oversight of the defense policy formation, Ak Party government took two major steps. First, with the inclusion of the civilian input, it redefined the major threats to national security in 2010 by shifting the focus from "reactionary Islamist groups", a threat in the former National Security Policy Documents (NSPD) [108], to a new list of threats, including cyber terror, global warming, and the aging population. The 2010 NSPD external threat list excluded Russia, Greece, Iran, and Iraq, which were the former "principal external threats".[109] Secondly, the military's input in the formulation of foreign policy was curtailed under the new Ak Party policy of "zero problem with neighbors"[110] which was partly the product of adopting Kantian approach and trading off soft power in the second part of the 2000s, rather than maintaining the old warrior national security Hobbesian state mindset.[111]

With respect to the question of the parliamentary oversight of the defense budgeting, the author observed a move from institutionally weak oversight to gaining strong oversight with the EU harmonization reforms. Formerly, the pre-EU harmonization law required Turkey's defense budget to be evaluated by the Parliamentary Planning and Budget Commission, and then to be debated and ratified by the General Assembly; but in practice, parliamentarians were not eager to discuss many elements of the sections on defense procurement and spending prior to the ratification of defense budget. Due to the political shyness of the parliamentarians and the limited authority of the Court of Auditors, the military expenses were largely exempted from civilian oversight. Despite having the Court of Auditor (*Satıştay*) for decades, the pre-EU harmonization court was subject to certain restrictions in auditing and scrutinizing military expenses. As a result of this restriction, the military was able to maintain its autonomy vis-à-vis the civilian control in planning defense resources, the budget and procurement until the reforms that gave full mandate to the Court to audit the military expenses in 2003 (Narli, 2009).

The EU harmonization reforms largely expanded civilian oversight of the defense budgeting and internal auditing of security institutions by the following changes in its laws: (i) the enactment of the 2003 Law on Public Financial Management and Control, which brought extra-budgetary funds into the overall state budget and (ii) the 7 May 2004 Constitutional amendments that brought an amendment to the last paragraph of article 160 of the Constitution on the Court of Audit, which had formerly exempted state property in the possession of the Armed Forces from the control of the Court of Audit in accordance with the principles of secrecy necessitated by national defense. Despite all these reforms, a satisfactory level of civilian oversight of the defense expenses had not been reached until 2011 when a progress was registered as a result of the expansion in the mandate of the Court to securitize the military expenses with the adoption of the Law on the Court of

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[107] On the traditional role of the military in the defining security policy and the changes in the actors forming security policy, see (Aras, Toktas and Kurt, 2010: 113-116).

[108] National Security Policy Documents (NSPD), updated regularly, were revised twice under the Ak Party governments, first, in 2005 (it was approved on Oct. 24, 2005 by the NSC and then by the Cabinet on March 20, 2006) and, secondly, in 2010. In 2005, NSPD, despite prior changes, the phrases "the necessity to employ the armed forces against internal threats, and the authority to take over political power if necessary to exterminate threats" remained unchanged. What was changed were the exclusion of "right-wing extremist movements from the list of threats and including the list of "activities to be monitored," separatist terrorism, religious extremism, and left-wing extremism were maintained on the list of internal threats." (Akay, 2010: 13).

[109] On this new list, see "Neighbors Partners not foes in Security Policy", *Today Zaman*, 24 August 2010.

[110] The civilian-formulated new foreign policy has become a fundamental in the definition of national security. For example, for the 2010 revision of NSPD, "President Gül emphasized that the document should be re-written in the light of the foreign policy principle of "zero problem with neighbours". (Özkan, 2010: 8) Likewise, on February 1, *2010,* the State Minister & Deputy Prime Minister Cemil Çicek said: *"Many changes have occurred in the country, the region and in the world since then. Now, we will review the National Security Policy Document in the light of those changes."* See *Hurriyet*, February 1-2 2010.

[111] Herd (2008) discusses the shift from Hobbesian to Kantian state in Turkish strategic culture.

Accounts (TCA, December 2010). This has led to effective external ex-post audits of armed forces' expenditure, and paved the way for audits of extra-budgetary resources earmarked for the defense sector, including the Defense Industry Support Fund. But excluding the Foundation for Strengthening the Armed Forces, which controls significant financial expenditure from the audit mandate of the Turkish Court of Auditors (TCA), is a major shortcoming of the revised Law on the TCA. Therefore, Turkey registered a limited progress in improving the parliament's capacity to monitor performance and to audit public expenditure, including defense expenditure (EU Commission, 2012: 9).

The civilian oversight related changes, associated with the constitutionally independent role of the military, are not institutional only. A change in the mindset of the parliamentarians, who have become more attentive to hearings of the defense budgeting in the parliamentary debate, is also observable. One of the authors' own analysis of the minutes of the parliament (2002-2010) revealed how Turkish parliamentarians became more and more enthusiastic to ask questions in the parliamentary hearing regarding the military budgeting within the last 10 years (Narli, 2009). Encouraged by certain segments of the civil society (discussed below) and media, parliamentarians are becoming more concerned with the civilian oversight of military expenses.

2. "Military relationship to chief executive"

Turkish constitution (Article 104 of the 1982 Turkish Constitution) states that President of the Republic represents the Supreme Commander of the Armed Forces. Under the current Turkish constitution, the Chief of Staff, who acts as the Commander-in-Chief during wartime, still does not fall under the aegis of the Minister of Defense, but reports to the Prime Minister. In times of war, the Chief of the General Staff assumes the authority of the Commander-in-Chief on behalf of the President, commands the Armed Forces, and establishes "the policies and programs related with the preparation of personnel for combat, intelligence, organization, training and logistic services". (TSK).[112]

3. "Coordination of defense sector "

Despite having a civilian Minister of Defense in charge of coordination of the defense sector, one of the prerogatives that provided autonomy to the pre-EU harmonization military was NSC's de jure power to formulate defense policy without much civilian input and to coordinate defense policies for combating "the internal and external threats" identified with the military. This was changed with the EU harmonization reforms increasing the civilian input in the formulation of security policies. Nevertheless, the Ministry of National Defense (MoD) is still weak in that it has no administrative or supervisory power over the Chief of General Staff, but it is tasked with the followings: to execute "political, legal, social, financial and budgetary services of national security policies"; to purchase "arms, artillery and logistical supplies, and to carry out the services of the defense industry in accordance with the Armed Forces defense policy, which is determined by the Council of Ministers and in line with the principles, priorities, and core programs set out by the Chief of Staff"; and to recruit personnel. (Akay, 2010: 10). There remains certain level of autonomy in this area (See Table 1: Maintaining Military Autonomy).

In the coordination of procurement, civilian institutions, including Defense Industry Executive Committee, Undersecretariat for Defense Industries (SSM) [113], and the Defense Industry Support Fund, are the principal actors. Defense Industry Executive Committee is the main decision making body of the system, which is headed by the Prime Minister, and composed of the Chief of General Staff and the Minister of National Defense. The Executive Committee makes the critical decisions

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[112] This is quoted from *http://www.tsk.tr/eng/genel_konular/tarihce.htm*.

[113] Undersecretariat for Defence Industries, by the year 2009, was coordinating and engaging 111 procurement projects, with a Total Amount of Contract (TAC) of 16 billion USD. (Özoğlu-Poçan, 2010).

related to major defense procurement projects; and it renders possible nationwide coordination between all entities with a defense industry dimension. What is lacking for a perfect civilian control of defense sector coordination, Sarıibrahimoğlu argues, is the limited mandate of SSM in facilitating the auditing of defense procurement by civilian experts, commissioned by political authorities. (Sarıibrahimoğlu, 2009). Consequently, the military has the ability to plan and to execute the procurement of weapons and equipment, as well as to use those arms and equipment independently (Akay, 2009).

4."The role in intelligence"

The militarization of the Turkish national security systems and policies, including the intelligence, enhanced the military's autonomy despite the National Intelligence Organization (MIT) being constitutionally an office under the Prime Minister prior to the EU harmonization. The result was a semi-independent intelligence organization under military dominance until the related reforms began to "civilianize" it (Toktaş and Kurt, 2010)[114] with the Ak Party government's policy to civilianize different units of intelligence and execution of several reforms. The creation of a civilian controlled coordination center at the Ministry of Internal Affairs in 2005, the National Intelligence Cooperation Council, was one of the critical steps in decreasing the military prerogatives in the intelligence; also targeted developing a cooperative culture amongst the intelligence agencies in Turkey where there were more than one intelligence organizations, including the Ministry of Internal Affairs' intelligence organization under the General Directorate of Security, and the Turkish General Staff's intelligence organization. To realize this target, in February 2010, the Parliament adopted a law (Law No. 5952)[115] for establishing an Under-secretariat for Public Order and Security (UPOS) under the Ministry of the Interior, affiliated to the Prime Ministry.
The under-secretariat is developing and coordinating counter-terrorism policies since July 2011; and it also ensures coordination between relevant institutions and organizations and serves as a secretariat for the Counter-Terrorism Coordination Board, convened twice in 2012, established under the undersecretariat. Another step of civilianization of the intelligence was setting up An Intelligence Assessment Centre in March 2012 to strengthen intelligence sharing and cooperation between civilian and military security institutions.

5.The role in the internal security

Assessing the military's role in the internal security, one of the prerogatives for military's autonomy, requires investigating if the military has any legal power to direct police activities. Despite the police falling under the Ministry of Interior, in the pre-EU harmonization era, the role of the military in internal security was visible. This visibility raised some concerns as the internal security became a fundamentally military matter throughout the 1990s. The sign of the concern was shown in the 2001 State Planning Organization Special Commission Report on Effective Security Services that documented a political tension due to "the monopoly of the military in internal security".[116]This monopoly was partly the product of the 1997 EMASYA protocol that sanctioned authority of the military over the police during the time of unrest. The EMASYA protocol was abolished in 2010; nevertheless, the business has been unfinished, noted by the 2011 and 2012 EU regular reports. They requested Ankara to do more work on the Law on the provincial administrations, which provided the legal basis for the annulled EMASYA Protocol allowing

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[114] On the recent civilianization of the intelligence in Turkey, see (Toktaş and Kurt, 2010).

[115] Published in *Resmi Gazete*, 4/3/2010 Sayı (No): 27511.

[116] See *State Planning Organization's Special Commission Report on Effective Security Services*, (Ankara 2001), p.41.

military operations to be carried out without the consent of local civilian authorities. This law has yet to be amended. [117]

Another area that brings military prerogatives in the field of internal security and hence in the sphere of police activities is the Gendarmerie, which is assigned the duty of protecting public order through law enforcement and through providing services. It is an armed force, possessing both a military and a police identity. Its Commander in Chief works under the authority of the Ministry of Interior; it reports to the Ministry of Interior regarding its policing and law enforcement activities, but to the Turkish Armed Forces in its military and wartime operations. Rather than to a civilian authority, the Gendarmerie is "accountable to the Chief of Staff on military matters as well as on matters of internal organization, promotion and registry systems, and personnel training and education." (Sarıibrahimoğlu, 2006: 96). Civilian authorities including governors have no authority to exercise direct authority over the Gendarmerie, and the disciplinary offences are taken to the General Staff, bypassing both the Ministries of the Interior and Defense. This is why civilian oversight of the Gendarmerie's law enforcement activities, was assessed to be "insufficient" in the EU Commission's Turkey 2012 Progress Report (EU Commission, 2012).

6. The Role in Education

 Formerly, the Chief of Staff had the authority to control the curricula of mandatory National Security Courses, given by military officers, in high schools. They were abolished in January 2012.

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 7.The role in military promotions

 The promotion of all military officers are signed exclusively by the President with the Turkish military exercising more power over the promotions via the Supreme Military Council, which has the *de jure* power over the high-level military appointments, promotions and expulsions from the military. These procedures were closed to judicial review until the September 2010 Constitutional amendments, approved in a referendum (September 12, 2010). Now those expelled from the military have the right to appeal to the judiciary, the right to legal remedies and also the right to defense, all signs of increased civilian influence in the military promotions.

8. The role in judiciary and military personnel facing judgment by civilian courts

Until the EU harmonization reforms, military justice, at the micro level, served as a complement to military prerogatives and the military's institutional ability to exert power on civilian politics. During 1973-1976 and 1984-2004, there were special courts composed of civil and military members[118] and separate military courts that tried civilians for various crimes. The role of the military in the courts was decreased by the Seventh EU Harmonization package (August 7, 2003) and the 2006 amendment of the related laws that decreased the competence of the military courts. The former abolished the trial of citizens by military courts with amendments in the Turkish Penal Code and in the Law on the Establishment and Trial Procedures of Military Courts; and it also removed cases related to criminal offenses, such as inciting soldiers to mutiny and disobedience, discouraging the public to do military service and undermining national resistance, from the jurisdiction of military courts, if these offenses are committed by civilians. The latter, amending the Law on Establishment and Legal Procedures of Military Courts, abolished the competence of

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[117] On the EU reports on Turkey's on civilian oversight of the military see (EU Commission, 2012: 12).

[118] Examples of them are State Security Courts, first founded in 1973 by an amendment to 1961 Constitution, were abolished in 1976. Later, under 1982 Constitution, the military government established State Security Courts (*Devlet Güvenlik Mahkemeleri*) again for trying cases involving crimes against the security of the state and organized crime. They began to operate in May 1984. Each court that was composed of five members (two civilian judges, one military judge, and two prosecutors) tried defendants accused of terrorism, drug smuggling, membership in illegal organizations, or espousing and disseminating prohibited ideas. **State Security Courts were formally abolished in June 2004.**

military courts for trying civilians during peacetime with the exception of collective military crimes.[119] Furthermore, passed in 2009, Law No. 5918[120] limited the jurisdiction of military courts to the crimes committed in connection with the military duties of military personnel. Another step was the constitutional amendments of September 2010 and legal reforms that delineated military subordination to the judicial branch and it led to the trial of the military in civilian courts. The result of all these reforms are the accountability of the military to civilian courts, which is largely supported by the new business elite, human right groups and the society at large.

4. Societal Mechanisms, Changing Political Culture and the Declining Military Autonomy

The civil military alliance, which was both class and political power alliance, had been sustained by the middle class and the business elite dynamics until the late 1990s when the newly emerging business elite and the newly urbanized middle classes, who were not contended with the political role of the military, began to gain influence in the economic and political domain throughout the 2000s. Already in the late-1990s, the military's political autonomy had been occasionally questioned by a politician[121] or a journalist,[122] at a time when the urban liberal intellectuals and leftists[123], in their articles, columns and speeches, had brought the flowing issues: transparency of the defense budgeting and civilian oversight of the military spending at the *ex ante* and *ex post* period, and confining the military's role to defense matters.[124]

The growth of anti-militarist new business elite and the emergence of newly urbanized middle and upper middle classes, a process that marked the 1990s, was the product of the new economic policy of liberalism and abandoning statism in the mid-1980s.[125] The resulting process, staring in the late 1990s and increasing its intensity in the 2000s, was the fragmentation of the elite and break down of the ideological cohesiveness and concordance between the Turkish elite and the military. The new set of political elites, which came to power in Turkey in the 2000s, was committed to economic globalization and liberal economic policy. Both they and their business elite allies endorsed the reforms of the 2000s, which subordinated the military to civilian control and to alter the military guardianship model. This is why the e-memorandum of April 27 did not create the planned impact and did not lead to government resigning, as it had been the case in the previous years. Some civil society associations and journalists reacted against the military issuing a memorandum, in April 2007.

The inter-class alliance against the military's autonomy, an alliance, which represents sharp cleavages whose members have bitter memories of the past republican policies, is composed of the formerly disorganized Turkish periphery, which became part of the newly urbanized middle and upper-middle classes, the religiously conservative industrialist elite, whose members originated from humble provincial lower middle classes, and finally and urban liberals who already formed an alliance against the military's autonomy and its political influence in the 1990s. This interclass

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[119] It was approved by the Parliament on the 29 June 2006 and published in the Official Gazette on the 5 July 2006.

[120] The Parliament of Turkey enacted Law No. 5918, on Amendments to the Turkish Penal Code and Other Laws. On June 26, 2009; the President of Turkey, Abdullah Gul, approved the Law and it became effective on July 9, 2009.

[121] For example, the then prime minister Mesut Yılmaz challenged the conventional national security culture and military's predominance in defining national security priorities without including civilian input, and argued that this afflicted Turkish politic, .on August 4, 2001. (Narli, 2011).

[122] Examples of journalists who wrote critical ideas on the military's role, in the late 1990s, were Ali Bayramoğlu and Ragıp Duran.

[123] On the leftist groups' challenge to the military's role in the 1980s and 1990s, see (Dikici Bilgin, 2009).

[124] For the voices demanding civilian control of the military budgeting and civilian oversight in the late 1990s and in the early 2000s, see Narli (2009).

[125] In Turkey, liberal economic policy adopted by Ozal ,who became the Prime Minister in 1983, brought new political values that were already in dissonance with the paternalistic and authoritarian political culture sustaining the autonomy of the military (Narli, 2011).

alliance against the military's political role has gained strong supporters[126] in the civil society, which was formerly largely inattentive to the issues related to the military's autonomy. Some of them, in a particular political context of 1997 soft coup, were claimed[127] to support the military's guardian role. The very conceptualization of civil society in Turkey as a democratization mechanism against the military's formal and informal political influence has become a subject of public debates in Turkey in recent decades. Yet, this debate, Dikici Bilgin (2009) noted, had been first introduced in the 1980s by the Turkish leftist groups and by the publications such as *Birikim, Zemin* and *Yeni Gündem*. Since the late 1990s, it has also been increasingly debated by the liberals, liberal leftists, neo-conservatives and Islamists (e.g. Mazlum Der).[128]

All these debates have shaken the cultural pillars sustaining the civil-military coalition and the military's political role. Indicators of this change, observed in the late 2000s, include the followings:

(I)   Frequent complaints in the media about the lack of transparency in defense budgeting;

(ii) an increasing number of books and articles questioning militarism and the growing number of anti-militarists web pages;

(iii) the increased number of academic studies on civil-military relations as well as on the military budgeting within the last 7-8 years;

(iv) the rise of cautious trust, rather than the absolute trust in the military. The survey result showed that 58 percent of the respondents, in November 2006, did not approve the military intervening in civilian politics, while 13.8 percent approved it. In 2009-2010, there were drops in the level of trust;

(v) a debate of the idea of being a conscientious objector, a person who, on the grounds of conscience, resists the authority of the state to impose military service; and

(vi) a new conviction is evolving: the time has come for regular civilian institutions to assume the responsibility of protecting democracy and secularism rather than calling the military to put domestic affairs in order.

Remaining Mechanisms Maintaining Military Autonomy

The areas where the military maintains varying levels of prerogatives and a relative degree of autonomy are summarized by using the following parameters (shown in Table 1): the military's ongoing executive prerogatives; military control over specific areas of economic activity; institutional autonomy of Chief of General Staff vis-a-vis Defense Minister; limited domestic transparency of the defense audit reports; and military educational institutions' autonomy.

The parliament does still not have full power to legislate for security-related issues, and to frame and to develop security policies and strategies; nor it does play the most effective part in formulating the defense budget and spending. The reason for this was related to the limited power of National Defense Commission (NDC) which is "authorized only to review drafts of legislation submitted by the Presidency of the Turkish National Grand Assembly." (Akay, 2010: 16). The NDC does not have the authority to deal with defense budgets and procurement, nor with security policies, including the NSPD (National Security Policy Document). Added to the problem of civilian oversight, there is a transparency issue because the NDC's "meeting proceedings and activities are not officially recorded." (Akay, 2010: 16).

Another indicators of the remaining autonomy of the military in the area of defense budgeting is the existence of a model in which the General Staff becomes a part of the auditing process. This model exists in Turkey and "it does not exist in any democratic country!" wrote Cengiz Aktar, an EU studies expert. Aktar (2010) argues that "the danger ahead is that the military would retain a relative degree of autonomy if the government seeks some sort of gentlemen's agreement with the

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[126] For example *genç siviller* (young civilians) often organize protest marches to bring the issue of military's political role. For more information on this groups, refer to http://gencsiviller.net/

[127] On the liberal and Islamist challenges to the military's role in the 1980s and 1990s, see (Dikici Bilgin, 2009).

[128] On the debate of the military and civil society in the leftist publications', see, Çubukçu, 1999).

soldiers."[129] Another area of remaining military autonomy [130] as an area in need of reforms is the composition of the Supreme Military Council, military justice system and the Personnel Law of the Turkish Armed Forces.

Related to the remaining prerogatives, the domestic transparency is limited due to keeping the auditing reports secret to the public is a short coming of the civilianization and democratization process in Turkey. The defense budget is disclosed to the public and significant off-budget military expenditure is not detailed. This is a concern for Turkey's progress in alignment with the EU standards.[131] This type of secrecy, which is justified in terms of national security concerns, is a mechanism to maintain military autonomy.

Table 1: Maintaining Military Autonomy

Remaining Mechanisms	*Explanation*
1.Military's Executive Prerogatives	The General Staff, directly reporting to the Prime Minister, coordinates the military relations of the Turkish Armed Forces with its counterparts in NATO member states.
2.Military control over specific areas of economic activity	Army Solidarity Institution (*OYAK) in industry has an* autonomous structure.
3.The Position Defence Minister vis-à-vis the Chief of General Staff	The ministry of defense, which acts as a mediator and facilitator between the Chief of Staff who has the authority to determine national defense policies and the government to channel sources of funding into the area of defense services, is relatively weak. The Chief of General Staff does not fall under the Ministry of Defense.
4.Domestic transparency and being accountable to society	It is limited and the military acts as a partner in decisions regarding publication of the defense audit reports.

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[129] Quoted in Aktar (2010). Aktar asked why the military was consulted on sharing such reports.

[130] The limited transparency was noted as a shortcoming of democratization by the EU Commission (2011: 15).

[131] The 2011 EU Turkey Report wrote: "Publication of the external audit reports on defence, security and intelligence institutions will be governed by a regulation yet to be adopted by the Council of Ministers." (EU Commission, 2011: 5).

5. Military Education Institutions' autonomy	Military schools are granted immunity and autonomy from external oversight (Akay, 2010: 16).

5.   Conclusion

Loosing military prerogatives and the trial of the military in the civilian courts have created discordance in the civil-military relations since the late 2000 in Turkey. The discordance was initially more pronounced at "the new political decision-making process", which is one of the indicators in Schiff's Concordance theory. The civil-military tension eased off in 2011-2012 while the military's formal and informal influence mechanisms were eliminated. The sources of civil-military friction prevail in Turkey, a country that is redefining its political institutions (including drafting a new constitution) and values amid the sharp cleavages creating internal conflict and a country that is open to regional conflict, as exemplified with the Syrian military shooting a Turkish jet in June, 2012.

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Credit Rating Heterogeneity across ASEAN+3 Bond Markets: Information Asymmetries and the Divergence of Regional Credit Ratings

Abstract:
Credit Rating Heterogeneity across ASEAN+3 Bond Markets: Information Asymmetriesand the Divergence of Regional Credit Ratings Seunghack Oh, Ashraf M. Ismail, and Nurrazaman Abstract We provide evidence for credit ratings heterogeneity across the ASEAN+3 bond markets,by which we mean that the gap between national and international credit ratings for thecorporate bond markets of Japan and Korea are much smaller than the gap betweennational and international credit ratings among the ASEAN bond markets. We explainthis credit ratings heterogeneity by arguing that there is a higher level of asymmetricinformation about corporate performance in emerging bond markets compared to theiradvanced counterparts, and consequently, the greater degree of information asymmetry inemerging bond markets prevents the convergence of national and international creditratings. Using price-to-book and price-earnings ratios as proxies for asymmetricinformation between corporate insiders and bond investors, we found that while theratings gaps in both advanced and emerging bond markets can be explained byasymmetric information, the more advanced bond markets of Japan and Korea are in factmore sensitive to information asymmetries than the emerging bond markets of theASEAN economies. In terms of policy implications,we propose institutional and legal reforms that may minimize information asymmetrieswithin and across the ASEAN+3 bond markets, which would accelerate regional financialintegration and enhance regional bond market efficiency.

Keywords: Information Asymmetry, Credit Ratings, Bond Markets, Market Efficiency
JEL classification code: C26

Dr. Ayla Zehra Öncer

Investigation of the Effects of Transactional and Transformational Leadership on Entrepreneurial Orientation

Abstract

The purpose of this study was to examine the possible effects of transactional and transformational leadership styles on entrepreneurial orientation. Transactional leadership discussed with two dimensional model consists of contingent reward and active management by exception, where transformational leadership discussed with four dimensional model consists of idealized influence, inspirational motivation, intellectual stimulation and individualized consideration. On the other hand entrepreneurial orientation was examined under three dimensions as; innovativeness, risk taking and proactiveness. The survey of this study is conducted on 171 employees of three multinational companies in Istanbul. The obtained data from the questionnaires are analyzed through the SPSS statistical packaged software. Analyses results showed that transactional leadership affects only proactiveness dimension while transformational leadership affects all three dimensions of entrepreneurial orientation. The only insignificance among transformational leadership and entrepreneurial orientation is between individualized consideration and risk taking.

Key Words: Transactional leadership, transformational leadership, entrepreneurial orientation, innovativeness, proactiveness, risk taking.

1. Introduction

Avolio and Bass (1991) suggested Full Range Leadership Theory. The constructs of this theory was consist of three types of leadership behavior; transformational, transactional, and laissez-faire leadership. They improved their theory over time and revised (Bass and Avolio, 2004) the latest version of full range of leadership model which consists four factors of transformational leadership style as; idealized influence (attributed and behavioral), inspirational motivation, intellectual stimulation, and individualized consideration; two factors of transactional leadership styles as; contingent reward and management-by-exception (active); and two factors of passive-avoidant leadership style as; management-by-exception (passive) and laissez-faire leadership style. This study focuses on the first two leadership styles.

Over the last decade, there has been a significant increase in the number of studies examining issues related to entrepreneurship and entrepreneurial orientation is a primary construct in the domain of entrepreneurship (Lumpkin & Dess, 1996). Covin and Slevin popularized the term entrepreneurial orientation and raised its importance as a concept in strategic management research as well.

This research aimed at investigating the effects of transactional and transformational leadership on entrepreneurial orientation. It contributes to our understanding of entrepreneurial orientation through displaying the effects of the dimensions of two contemporary leadership styles in order to provide in-depth and significant knowledge about the subject. The paper begins with a literature review of transactional and transformational leadership and entrepreneurial orientation, then goes on to development of hypotheses. The hypotheses tested if the factors of transactional and transformational leadership have significant effects on entrepreneurial orientation. For that purpose 6 sub-hypothesis were generated to examine the relationships in-depth. Sample and data collection, and research measures and reliabilities discussed in the next section. It concludes with discussing the findings and the implications to improve entrepreneurial orientation and recommendation is provided for practitioners and academics.

2. Literature Review and Development of Hypotheses

2.1. Transactional and Transformational Leadership

Transactional leadership concerns in transaction of rewards for followers' performance (Burns, 1978). Transactional leadership involves contingent reinforcement. Followers are motivated by the leaders' promises, praise, and rewards or they are corrected by negative feedback, reproof, threats, or disciplinary actions. The leaders react to whether the followers carry out what the leaders and followers have "transacted" to do (Bass and Steidlmeier, 1999). Transactional leadership encourages followers to construe their work in terms of strategic means stressing rules, responsibilities, expectations, stability, avoiding errors, and a concrete, short-term plan. These transactional behaviors fit prevention-focused individuals' preference to direct goal striving toward obligations and responsibilities, their preference for stability, their concern with avoiding mistakes, and their preference to look at short-term details (Hamstra et al., 2011). Bass and Avolio (1993) comprised transformational leadership with two factors which are contingent reward and active management-by-exception.

Contingent Reward

Contingent reward is a more constructive, positive transaction involving directed, consultative or negotiated agreements between leaders and followers about objectives and/or task requirements. The leader promises and/or provides suitable rewards and recognition if followers achieve the objectives or execute the tasks as required (Bass, 1985). In contingent reward leaders either make assignments or they may consult with followers about what is to be done in exchange for implicit or explicit rewards and the desired allocation of resources (Bass and Steidlmeier, 1999). Leaders, who have behaviors of expectation clarifying, negotiation, promises making, and contingent rewards offering to followers when the goals are achieved (Bass & Avolio, 2004). Transactional contingent reward leadership may be the basis for structuring developmental expectations, as well as building trust, because of a consistent honoring of contracts over time (Avolio et al., 1999)

Management-By-Exception (Active)

When leaders engage in active management by- exception, they monitor follower performance and correct followers' mistakes (Bass and Steidlmeier, 1999). Management-by-exception is active, such as when the leader arranges to monitor and correct follower performance (Bass et al., 1996). Leaders, concentrate on identifying and correcting the mistakes and deviations from standard of task, and take disciplinary actions when the irregularities occurred (Bass & Avolio, 1994).

Bass's conceptualization of the transformational leader extended House's (1977) idea of the charismatic leader by incorporating the individualized consideration and intellectual stimulation aspects (Lowe et al., 1996). Transformational leadership occurs when leaders broaden and elevate the interests of their employees, when they generate awareness and acceptance of the purposes and mission of the group, and when they stir their employees to look beyond their own self-interest for the good of the group (Bass, 1990). Transformational leadership encourages an idealistic, optimistic outlook on the future, communicates high expectations, focuses followers' attention on long-term vision, facilitates change, and supports new ways of working. Transformational leadership encourages followers to carry out and construe their work in terms of strategic means stressing ideals, optimism, positive expectations, change, eagerness, and an abstract long-term plan. These transformational behaviors fit promotion-focused individuals' directedness at an ideal self, their preference for optimism and positive expectations their preference for focusing on a long-term time perspective, working in changing situations, and their eagerness to try out new things (Hamstra et al., 2011). Transformational leaders not only exchange between rewards and the leaders' requirement but also motivate the followers to transcend their self-interests for the goals. They are able to change members' behaviors to encourage their visions for achievement (Howell & Avolio, 1993). Transformational leadership influences followers by getting them to transcend their self-interests for the good of the group or organization, while also enhancing followers' expectations and abilities, and their willingness to take risks (Bass & Avolio, 1993).

Transformational leadership contains four components as; idealized influence or charisma (attributed and behavioral), inspirational motivation, intellectual stimulation, and individualized consideration (Bass, 1985, 1998; Bass & Avolio, 1993).

Idealized Influence

If the leadership is transformational, its idealized influence is envisioning, confident, and sets high standards for emulation (Kanungo & Mendonca, 1996). Leaders, who have charismatic character such as support and instill the pride to the followers, go beyond self-interest for the advantage of group and organization, encourage proceed to build trust and respect to leader and exhibit the sense of self-confident and direction. In addition leaders, who have charismatic actions such as highlight on the sense of purpose and performance, emphasize on the moral and ethics for decisions (Avolio & Bass, 2003). Charismatic leaders are highly esteemed. They are role models that followers strive to emulate and align around a vision, common purpose, and mission (Bass et al., 1996). Charismatic leaders have great power and influence. Employees want to identify with them, and they have a high degree of trust and confidence in them. Charismatic leaders inspire and excite their employees with the idea that they may be able to accomplish great things with extra effort (Bass, 1990).

Inspirational Motivation

The inspirational motivation of transformational leadership provides followers with challenges and meaning for engaging in shared goals and undertakings (Bass and Steidlmeier, 1999). Leaders, who encourage their followers to view optimistically accomplishment in the future, communicate clearly with their vision and reveal certainly toward the goals that they will be reach (Bass & Avolio, 2004). Inspirational leaders provide meaning and optimism about the mission and its attainability. However, followers may not necessarily seek to emulate these leaders, resulting in a key distinction with charismatic leaders (Bass et al., 1996).

Intellectual Stimulation

The intellectual stimulation of transformational leadership incorporates an open architecture dynamic into processes of situation evaluation, vision formulation and patterns of implementation. Such openness has a transcendent and spiritual dimension and helps followers to question assumptions and to generate more creative solutions to problems (Bass and Steidlmeier, 1999). Intellectually stimulating leaders are willing and able to show their employees new ways of looking at old problems, to teach them to see difficulties as problems to be solved, and to emphasize rational solutions (Bass, 1990). They encourage followers to question basic assumptions, and to consider problems from new and unique perspectives (Bass et al., 1996).

Individualized Consideration

Individually considerate leaders work with followers, diagnosing their needs and then elevating them to higher levels on Maslow's hierarchy of needs (Bass et al., 1996). The leader treats each follower as an individual and provides coaching, mentoring and growth opportunities (Bass, 1985). The individualized consideration component of transformational leadership underscores the necessity of altruism if leadership is to be anything more than authoritarian control (Kanungo & Mendonca, 1996). Individually considerate leaders pay close attention to differences among their employees and act as mentors to those who need help to grow and develop (Bass, 1990).

2.2. *Entrepreneurial Orientation*

According to Miller (1983) an entrepreneurial firm is one that engages in product-market innovation, undertakes somewhat risky ventures, and is first to come up with proactive innovations, beating competitors to the punch. Based on this definition and prior literature, entrepreneurship researchers have defined the term entrepreneurial orientation. Entrepreneurial orientation has been conceptualized as the process and decision-making activities used by entrepreneurs that leads to new entry and support of business activities (Okpara, 2009).

Entrepreneurial orientation is a strategic construct whose conceptual domain includes certain firm-level outcomes and management-related preferences, beliefs, and behaviors as expressed among a firm's top-level managers (Covin et al., 2006). It is the presence of organizational-level entrepreneurship and based on Miller's (1983) conceptualization three dimensions of entrepreneurial orientation have been identified and used in the literature by several researchers; innovation, risk taking and proactiveness (Covin and Slevin, 1989; Lumpkin and Dess, 1996).

Innovativeness

Innovativeness reflects a firm's tendency to engage in and support new ideas, novelty, experimentation, and creative processes that may result in new products, services, or technological processes (Lumpkin and Dess, 1996). Innovativeness is the predisposition to engage in creativity and experimentation through the introduction of new products or services as well as technological leadership through research and development in new processes (Rauch et al., 2009). It includes seeking creative solutions to problems and needs. This dimension involves product innovations, the development of new markets and new processes and technologies for performing organizational functions (Kropp et al., 2006; Miller, 1983). Innovativeness is an important component of an entrepreneurial orientation, because it reflects an important means by which firms pursue new opportunities (Lumpkin and Dess, 1996).

Risk Taking

According to Kropp et al. (2005) entrepreneurs' perception of risk is the uncertainty and potential losses associated with the outcomes which may follow from a given set of behaviors. The

risk taking dimension refers to the willingness of management to commit significant resources to opportunities in the face of uncertainty (Okpara, 2009). It involves taking bold actions by venturing into the unknown, borrowing heavily, and/or committing significant resources to ventures in uncertain environments (Rauch et al., 2009).

Proactiveness

Proactiveness refers to processes aimed at anticipating and acting on future needs by seeking new opportunities which may or may not be related to the present line of operations, introduction of new products and brands ahead of competition, strategically eliminating operations which are in the mature or declining stages of life cycle (Lumpkin and Dess, 1996). According to Stevenson and Jarillo (1990) proactiveness is the organizational pursuit of business opportunities that were deemed by the firm to be positive or favorable. Proactiveness dimension is crucial to an entrepreneurial orientation because it suggests a forward-looking perspective that is accompanied by innovative or new-venturing activity (Lumpkin and Dess, 1996).

2.3.   *Development of Hypotheses*

In their study Politis and Harkiolakis (2008) stated that transformational leadership is strongly and more positively related to innovation dimension of entrepreneurial orientation compared to transactional leadership. In addition, it was found that transformational and transactional leadership equally affected the risk taking and proactiveness dimensions. Yang (2008) also examined the relationships between leadership styles and entrepreneurial orientation as well as their effects on business performance. It appeared that; transformational leadership is significantly more correlated to the business performance than is transactional leadership, entrepreneurial orientation is positively related to performance, and transformational leadership with higher entrepreneurial orientation can contribute to higher business performance.

Kotter (1995) suggested that a firm's entrepreneurial proclivity is enhanced to the extent that a transformational vision seeps into the very fiber of the firm to become the way people do things in an organization. Furthermore, Bass points out that transformational and transactional leadership behavior are both appropriate and significant in different ways to motivate employees and they do not replace each other. Based on the various studies in literature and our knowledge, it is reasonable to propose that:

Hypothesis 1: Transactional leadership positively influences innovativeness (H1a), risk taking (H1b), and proactiveness (H1c) dimensions of entrepreneurial orientation.

Hypothesis 2: Transformational leadership positively influences innovativeness (H2a), risk taking (H2b), and proactiveness (H2c) dimensions of entrepreneurial orientation.

Figure 1 shows the hypothesized impacts of transactional and transformational leadership on entrepreneurial orientation.

Figure 1: Hypothesized Impacts of Transactional and Transformational Leadership on Entrepreneurial Orientation
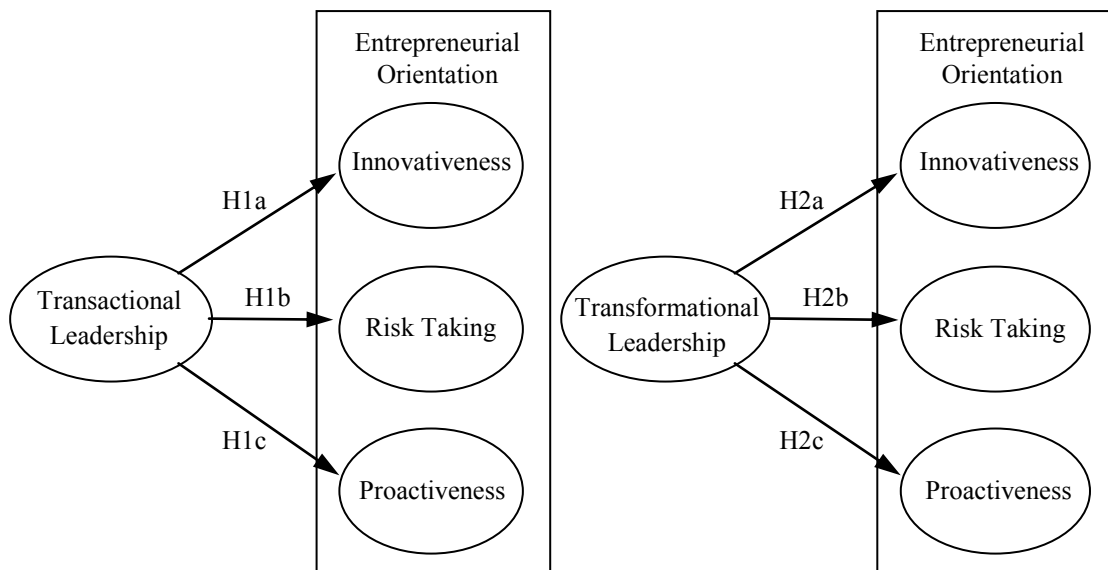
3. Methodology

3.1. Sample and Data Collection

The questionnaire of the study delivered to three multinational companies in Istanbul and data related to leadership styles and entrepreneurial orientation gathered directly from the non-executive employees of companies. The questionnaires distributed through the Human Resources Department including a cover letter explained the purpose of the study and provided instructions on how to complete the questions. Out of 250 distributed questionnaires, total of 179 were returned, however 171 of them were valid and used in analyses (n=171). The return rate of the questionnaires was 71 %. Random sampling technique was used to distribute the questionnaire in order to determine the employees' perceptions regarding transactional leadership, transformational leadership and entrepreneurial orientation. Data obtained from questionnaires analyzed through the Statistical Package for the Social Sciences (v.18) software. Reliability tests, factor analysis, correlation and regression analysis used to determine the proposed relationships between variables of the research model.

3.2. Research Measures and Reliabilities

Two different scales used for the measurement of the variables. The first was the Multifactor Leadership Questionnaire (5X - MLQ), which was developed by Bass and Avolio (1997) used to assess the independent variable as employees' leadership style perception (transactional and transformational). The MLQ is one of the most widely used and tested instruments to measure transformational and transactional leadership behaviors, and it is suitable for both the leader's self-evaluation and subordinates' evaluations of their supervisor (Bass & Avolio 1997). The survey consists of 45 items measuring transactional, transformational and passive-avoidant leadership. The passive-avoidant/laissez-faire leadership factor was not assessed which was identified by Bass and

Avolio (2000) as non-transformational and non-transactional, so the items regarding this factor excluded from the instrument. Transactional leadership consists of contingent reward and active management-by-exception factors while transformational leadership consists of idealized influence, inspirational motivation, intellectual stimulation and individualized consideration. The items were answered on 5-point Likert scale ranging from 1 (not at all) to 5 (frequently, if not always).

The Cronbach's Alpha scores of MLQ were; 0,85 for contingent reward, 0,84 for active management-by-exception, 0,86 for idealized influence, 0,82 for inspirational motivation, 0,85 for intellectual stimulation, and 0,83 for individualized consideration. Furthermore, the overall score of Cronbach's Alpha for transactional leadership was 0,88, while the overall score for transformational leadership was 0,87. The scores indicate that MLQ is a reliable measure.

The second assessment instrument for dependent variable was the Entrepreneurial Orientation Questionnaire (EOQ) which was widely used and tested to measure entrepreneurial orientation in literature. The scale was developed by Covin and Slevin (1989) based on the earlier studies of Khandwalla (1976/1977) and Miller and Friesen (1982). It consists of nine items with each three item measuring innovativeness, risk taking and proactiveness dimensions of entrepreneurial orientation using a 7-point Likert scale.

The Cronbach's Alpha scores of EOQ were; 0,86 for innovativeness, 0,83 for risk taking and 0,84 for proactiveness dimensions. In addition, the overall score of Cronbach's Alpha for entrepreneurial orientation was 0,88 which indicates that the EOQ is reliable.

Before conducting the factor analyses, the Kaiser-Meyer-Olkin measure of sampling adequacy and the Bartlett test of sphericity were applied to the questionnaires. Both measures indicate that MLQ and EOQ were suitable for factor analysis. So, confirmatory factor analysis conducted to assess the construct validity of the scales. Table 1 shows the factor analysis results of MLQ. There left 8 items for transactional leadership and 16 items for transformational leadership, after dropping statements due to cross loading or low Cronbach's alpha scores.

Table 1: Factor Analysis of Multifactor Leadership Questionnaire

Factors of Transactional Leadership	Loadings
Factor 1: Contingent Reward	
recognizes achievement	,85
rewards achievement	,78
clarifies rewards	,70
assists based on effort	,68
Factor 2: Management-by-Exception-Active	
concentrates on failures	,79
tracks mistakes	,72
focuses on mistakes	,65
puts out □fires	,64
Factors of Transformational Leadership	Loadings
Factor 1: Idealized Influence (attributed and behavioral)	
goes beyond self-interest (IIA)	,87

displays power and confidence (IIA)	,75
emphasizes the collective mission (IIB)	,71
talks of values (IIB)	,67
Factor 2: Inspirational Motivation	
talks enthusiastically	,80
talks optimistically	,79
arouses awareness about important issues	,75
expresses confidence	,60
Factor 3: Intellectual Stimulation	
suggests different angles	,76
suggests new ways	,75
seeks different views	,66
re-examines assumptions	,50
Factor 4: Individualized Consideration	
focuses on strengths	,83
individualizes attention	,79
teaches and coaches	,75
differentiates among employees	,60

Table 2 indicates the factor analysis results of EOQ. As seen there were 3 items for innovativeness, 3 items for risk taking, and 3 items for proactiveness factors of entrepreneurial orientation. None of the items had to be dropped out of the analysis.

Table 2: Factor Analysis of Entrepreneurial Orientation Questionnaire

Factors of Entrepreneurial Orientation	Loadings
Factor 1: Innovativeness	
new lines of products or services	,79
changes in product or service lines	,78
emphasis on R&D, technological leadership, and innovations	,76
Factor 2: Risk Taking	
proclivity for high risk projects	,81
the necessity of bold, wide-ranging acts	,77
adopting o bold aggressive posture	,72
Factor 3: Proactiveness	
initiating actions	,79
introducing new products/services, administrative techniques,	,75

operating technologies, etc.	
adopting a very competitive, 'undo the-competitors' posture	,71

4. Findings

According to the results of the demographic questions related to the employees' gender, age, and tenure in their present position; 32% of employees were female and 68% were male, the average age of the employees was 33. Of the employees, 16% have spent less than 5 years in their present position, while %46 of them has spent between 1 and 5 years, %23 spent between 6 and 10 years, and % 15 spent more than 10 years.

In terms of the correlations between independent and dependent variables Table 3 indicates that, components of transactional leadership have positive correlations with proactiveness factor, and no correlations with other two dimensions of entrepreneurial orientation as innovativeness and risk taking. In this case it is clear that there is no need to conduct a regression analysis between transactional leadership and innovativeness and risk taking dimensions of entrepreneurial orientation since they do not have correlations. So it means that hypothesis 1a and 1b are rejected. In addition, there is a positive relationship between all four components of transformational leadership and all three dimensions of entrepreneurial orientation.

Table 3: Correlation Matrix between Factors of Leadership and Entrepreneurial Orientation

Factors of Transactional Leadership	*Factors of Entrepreneurial Orientation*		
	Innovativeness	Risk Taking	Proactiveness
Contingent Reward	,514	,495	,375*
Management-by-Exception-Active	,365	,237	,314*
Factors of Transformational Leadership			
Idealized Influence	,521*	,387*	,466*
Inspirational Motivation	,214*	,301*	,537*
Intellectual Stimulation	,693*	,491*	,542*
Individualized Consideration	,248*	,321*	,596*

* Correlation is significant at 0,05 level (p<0,05) (2-tailed)

The hypothesized relationships of the study were tested using multiple regression analysis which is appropriate to analyze the relationships between several independent variables and a single dependent variable at a time. The dimensions of entrepreneurial orientation as innovativeness, risk taking and proactiveness were dependent variables of the study, while the components of transactional leadership as contingent reward and active management by exceptions, and the

components of transformational leadership as idealized influence, inspirational motivation, intellectual stimulation and individualized consideration were independent variables.

For testing hypothesis 1c multiple regression analysis was conducted between the components of transactional leadership and the proactiveness dimension of entrepreneurial orientation. As seen in Table 4, contingent reward (β=0,365, Sig.0,001) and active management by exceptions (β=0,244, Sig.0,000) are positively and significantly associated with proactiveness while contingent reward is strongly and more positively related compared to active management by exceptions. In addition adjusted R square value of the multiple regression analysis is presented in Table as well and is statistically significant. According to the tolerance and VIF values, the results indicate no multicollinearity between independent variables where the collinearity statistics show that the tolerances for both components of transactional leadership are greater than 0.1 and the Variation Inflation Factors (VIF) are both less than 10. Therefore, it can be proposed that transactional leadership affects proactiveness dimension of entrepreneurial orientation and hypothesis 1c is supported.

Table 4: Regression Analysis for Transactional Leadership and Proactiveness

Variables	Sig.	t	Beta
Proactiveness			
Contingent Reward	,001	,836	,365*
Management by Exception (Active)	,000	,914	,244*
Adjusted R² = ,387			
F = 5,896 Significance of F =,001			
Tolerance and VIF Values of Variables		*Tolerance*	*VIF*
Contingent Reward		,874	1,146
Management by Exception (Active)		,812	1,598

* Significant at 0,05 level (p<0,05)

According to the regression analyses results in Table 5, all four components of transformational leadership as idealized influence (β=0,522, Sig.0,001), inspirational motivation (β=0,321, Sig.0,000), intellectual stimulation (β=0,644, Sig.0,000) and individualized consideration (β=0,216, Sig.0,001) are significantly and positively associated with innovativeness dimension of entrepreneurial orientation. Intellectual stimulation has the strongest effect while individualized consideration has the weakest. So it can be stated that transformational leadership positively influences innovativeness and hypothesis 2a is supported.

Furthermore, the components of transformational leadership, except individualized consideration, are positively related to risk taking dimension of entrepreneurial orientation. Intellectual stimulation (β=0,584, Sig.0,001) has the strongest effect here as well, compared to idealized influence (β=0,411, Sig.0,000) and inspirational motivation (β=0,154, Sig.0,000). Thus, it can be proposed that transformational leadership highly influences risk taking and so hypothesis 2b is partly supported.

The findings also indicate that all four components of transformational leadership as idealized influence (β=0,267, Sig.0,000), inspirational motivation (β=0,324, Sig.0,001), intellectual stimulation (β=0,539, Sig.0,001) and individualized consideration (β=0,614, Sig.0,001) are significantly and positively associated with proactiveness dimension of entrepreneurial orientation.

Individualized consideration has the strongest effect compared to other components and idealized influence has the weakest. Therefore it is displayed that transformational leadership positively influences proactiveness and hypothesis 2c is supported.

In addition, adjusted R square values of the multiple regression analyses are statistically significant and according to the tolerance and VIF values multicollinearity is not a threat for the multiple regression.

Table 5: Regression Analysis for Transformational Leadership and Entrepreneurial Orientation

Variables	*Sig.*	*t*	*Beta*
Innovativeness			
Idealized Influence	,001	4,554	,522*
Inspirational Motivation	,000	5,632	,321*
Intellectual Stimulation	,000	7,745	,644*
Individualized Consideration	,001	4,546	,216*
Adjusted R² = ,474			
F = 6,841 Significance of F = ,001			
Variables	*Sig.*	*t*	*Beta*
Risk Taking			
Idealized Influence	,000	3,895	,411*
Inspirational Motivation	,000	2,458	,154*
Intellectual Stimulation	,001	4,483	,584*
Individualized Consideration	,000	6,133	,369
Adjusted R² = ,496			
F = 6,405 Significance of F =,000			
Variables	*Sig.*	*t*	*Beta*
Proactiveness			
Idealized Influence	,000	5,122	,267*
Inspirational Motivation	,001	4,479	,324*
Intellectual Stimulation	,001	6,633	,539*
Individualized Consideration	,001	4,512	,614*
Adjusted R² = ,581			
F = 8,632 Significance of F = ,000			
Tolerance and VIF Values of Variables	*Tolerance*	*VIF*	
Idealized Influence	,604	1,254	
Inspirational Motivation	,745	1,365	
Intellectual Stimulation	,850	1,704	
Individualized Consideration	,814	1,036	

*
Significant at 0,05 level (p<0,05)

Figure 2 summarizes the impacts of both transactional and transformational leadership on entrepreneurial orientation.

Figure 2: Impacts of Transactional and Transformational Leadership on Entrepreneurial Orientation
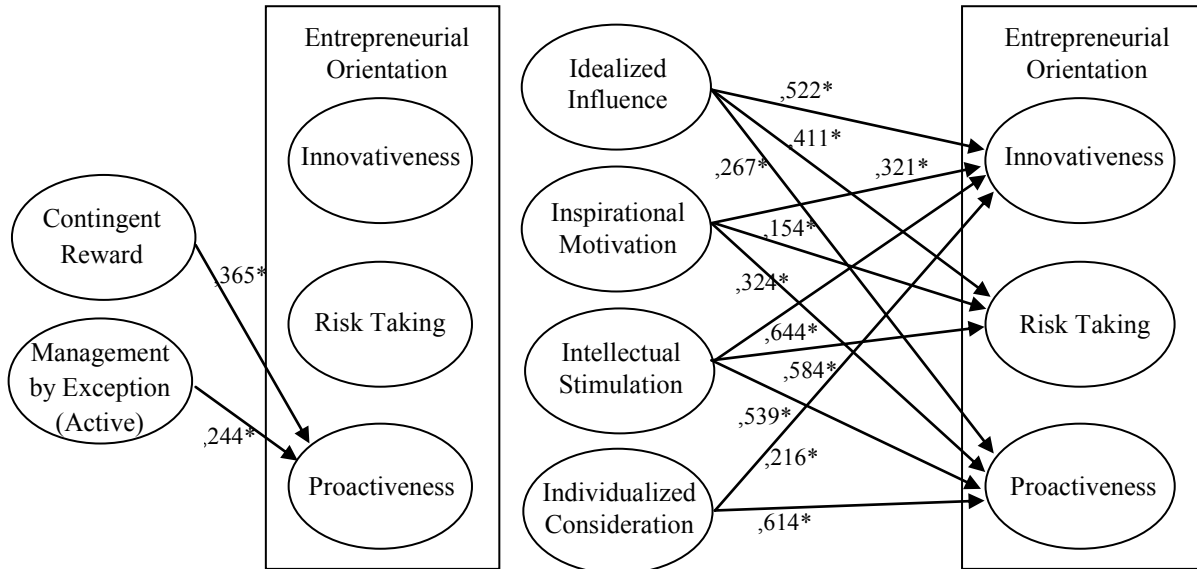
5. Conclusion

This study investigates the effects of the transactional and transformational leadership on entrepreneurial orientation of organizations. According to the correlation and multiple regression analyses, three out of the six proposed hypotheses were fully supported, one was partly supported and two were rejected.

The results of this study suggest that transactional leadership has no association with either innovativeness or risk taking dimensions of entrepreneurial orientation, but interestingly contingent reward and active management by exceptions influence proactiveness of employees. As we know contingent reward may be the basis for structuring developmental expectations and building trust (Avolio et al., 1999). It is reasonable to accept that it can encourage employees to act proactive. Furthermore, in active management by exception leaders concentrate on employees' performance and correct their mistakes (Bass and Steidlmeier, 1999). This approach helps employees to think about new processes or business methods that will minimize mistakes and maximize their performance. In other words active management by exception creates an impact to act more proactive.

The second group of hypotheses is about the relationship between transformational leadership and entrepreneurial orientation. It is clear that components of transformational leadership have significant effects on all three dimensions of entrepreneurial orientation except individualized consideration which has no impact on risk taking. Hence individualized consideration concentrate on diagnosing employees' needs (Bass et al., 1996) and providing coaching and mentoring (Bass, 1985), it is reasonable for this component not to affect the tendency of taking risks but enhance employees' innovativeness and proactiveness.

The other components as idealized influence, inspirational motivation and intellectual stimulation are all together influence innovativeness, risk taking and proactiveness dimensions of

entrepreneurial orientation. Intellectual stimulation has the greatest impact on all three dimensions. The intellectual stimulation helps employees' to question assumptions and to generate more creative solutions (Bass and Steidlmeier, 1999), encourages considering problems from new and unique perspectives (Bass et al., 1996). So employees' who perceive the act of intellectual stimulation from their leaders tend to think more creative, innovative, and proactive and will to take risks.

Idealized influence has the second strongest effect on innovativeness and risk taking following intellectual stimulation which also means that, employees' participated in this study highly perceive their leaders as charismatic. Charismatic leaders have great power and influence, and employees want to identify with them. According to these results we can assume that leaders of the related companies support innovativeness and so the employees' impressed and tend to act innovative based on their trust and confidence in their leaders. In addition, charismatic leaders inspire and excite their employees with the idea that they may be able to accomplish great things with extra effort (Bass, 1990) and this approach expands employees' willingness to take risks.

Inspirational motivation also influences all three dimensions of entrepreneurial orientation and it has almost equal effects on innovativeness and proactiveness which is reasonable. This result can be interpret as leaders related to this study encourage their employees to view optimistically accomplishment in the future, communicate clearly about their vision and mission, and reveal certainly toward the goals that they will be reach (Bass & Avolio, 2004). Due to employees' high confidence on the achievement in the future, they perform with great perseverance and desire which contribute them to think and act innovative and proactive.

In summary, transformational leadership is positively and significantly related to innovativeness, risk taking and proactiveness by all means and contributes the most to the entrepreneurial orientation. But it has to be considered that transactional leadership also influences proactiveness dimension. As we know, there is no type of leadership that can be described as the best, so the advantageous way is both transformational and transactional. As supported by the results of the study, transactional and transformational leadership are both have effectiveness and they do not replace each other (Bass, Steidlmeier, 1999). Both types of leadership make a contribution to entrepreneurial orientation of organizations, where transactional affects mostly proactiveness, and transformational affects the total orientation process. So it can be argued that leaders who want to involve in entrepreneurial activities, should pay more attention to contemporary leadership types and their attributed and behavioral requirements.

The study has limitation related to the sample which complicates the generalisation of the results, so future studies could expand the sample size. Besides, this quantitative study was able to reveal the relationships between variables, but not totally adequate to explain possible reasons behind these relations. Therefore, future studies could also consider qualitative researches and adding different variables.

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Elizabeth Real de Oliveira

Measuring Work Engagement by UWES: HR Consultants Perspective

Abstract:
Having in mind the current economic situation, reducing costs and lead-times assume a key relevance for industry and companies´ competitiveness. Bearing this in mind, researchers have devoted special attention to this topic. That´s why it is important to understand how these concepts are viewed and treated in the literature. In this paper, we present a systematic literature review of academic papers covering the topics of the Value Chain, Value Stream Mapping, Material Information Flow Analysis and Lean Manufacturing, with a time span of 12 years, beginning 2000 to date of search (November 2012, 15). Our initial sample comprised 693 papers, published in the ISI Database that, after a relevance analysis, was reduced to a working base of 210 academic papers. Our first step was to build a review protocol. The search was exactly done in consonance to the review protocol, in order to allow a rigorous study and to assure replicability. Using the Endnote X4, we have extracted records, in order to develop the preliminary relevance analysis and sorting we exported the records to xml and imported these into NVivo8. The results were then mapped, using RefViz software and data was analyzed using descriptive statistics and content analysis. Through this mapping we´ve verified that this area of study is still growing, with greater evidence from 2006 onwards, where published papers increased by 300%. The Journals that stand out were the International Journal of Physical Distribution & Logistics Management with 15% of the publications, followed by Supply Chain Management with 13% of publications. Regarding the publications by author, we verified that there are 10 authors, who published twice on the topic and 3 authors which published 3 times an article in this field. Fourteen clusters emerged from data mining in RefViz. After analysis we decided to explore in an integrative review approach the clusters related to Lean and VSM referencing the main authors and perspectives.

Erella Regev

Using Social Media for Pre Employment Screening

Abstract

The integration of social media in pre employment screening is a challenging controversial issue. The debate focuses on prejudices in hiring, discrimination, invasion of privacy and labor pool accessibility. With recent cases of prospective employers asking job candidates to provide their Facebook passwords, the use of social media in hiring received significant US media coverage and new state legislations, but less academic attention. While managers are somewhat reluctant to integrate social media in hiring practices, Generation Y preferences may leave them with no choice. Gen Y ("connectivity everywhere") redefines access to information with no divide between private and professional life. Many include social media links in their resumes. Can and should information shared in social media used in pre employment screening? The paper discusses the legal and ethical aspects of this practice addressing concerns of discrimination, privacy, and transparent talent management; among others.

Keywords: Social media, pre employment screening, employment law, HR ethics,
            talent management, Generation Y

Introduction

Social networking and online media-sharing sites are increasingly referred to as 'social media'. The key players included in social media collective term are: Facebook, MySpace, Twitter, LinkedIn, Google Groups, blogs, online forums, and YouTube. Facebook is the fastest growing social network in the world. LinkedIn is a social networking site aimed at the business user market and professional community connections. YouTube is the world's largest video-sharing service. Tweeter is a micro-blog that allows members to post instant messages ('tweets') to be shared with 'followers'.
Social media is an efficient and effective valuable tool to share ideas, connect, interact, collaborate and engage. Presence in social media is an important part of business contemporary strategy. Social media has transformed organizations and the way we live and work. More changes are expected as Generation Y, the young generation of employees, joins the workforce.

Companies use social media for branding, marketing, visibility, and attractiveness. Human Resource participation in social media is rapidly increasing and includes various recruiting elements:

(a)   Posting positions on Facebook groups, LinkedIn, online job boards and job aggregators.
(b)   Sourcing and reaching out to a targeted or niche audience such as passive candidates or potential candidates for hard to fill positions.
(c)   Using blogs and online forums to answer pre-employment inquiries and establish informal relationships with potential candidates, and
(d)   Talent acquisition: presence, interaction, talent-spotting and applicant screening.

The recent economic recession led to a growing interest in the 'hidden job market', a job market based on personal and professional connections. Social networking has significant role in the hidden job market. Job seekers use Facebook, LinkedIn, Twitter, discussion boards and blogs to maximize their online presence: gaining insights, expanding networks, identifying leads and finding unadvertised openings. Likewise, many employers prefer hiring job seekers who demonstrated initiative and enthusiasm by contacting them directly on 'cold' sourcing by published job openings (Adams, 2011).

Generation Y

Generation Y (also known as the Millennial Generation, Trophy Kids, and Nexters) born between 1981 and 2001. The general characteristics of this generation are: early adopters of communication through technology, heavy users of digital technologies ('digital natives'), interactive, visual, multitask, connect through social networking, creative, have high expectations from their workplace (but no loyalty in return), hold strong views and strong sense of entitlement (Alsop, 2008; Coates, 2007; McGee, 2004; Zemke, Raines and Filipczak, 2000).). "These outspoken young people tend to be highly opinionated and fearlessly challenge recruiters and bosses" (Aslop, 2008).
Gen Y redefines access to information as 'connectivity everywhere'; there is no divide between private and business life. Coates (2007) described Generation Y use of technology for 'everything'. Facebook is considered an integral part of young people lives. Visiting social networking sites is one of the most frequent activities. Verhoeven, Mashood and Chansarkar (2008) indicated the large number of hours per day Generation Y-ers spend online for non-study related activities.
As Gen Y-ers search online for colleges and jobs, social media is becoming one of the most powerful talent recruitment tools. Companies and colleges focus on Facebook to attract candidates as it makes sense to "meet students where they are: social media" (Heiberger & Junco, 2011). Gen-Y candidates include links, ePortfolios and information shared in social media in their applications. Digital technology, low cost and high-speed internet increase the use of video resumes.
Millennials expect their jobs to fit their lives rather than adapting to the workplace. Their participation in social media incorporates contrasting elements. Millennials reveal private information that can reach unintended audiences and at the same time, rely on others, including employers, to refrain from judging them across contexts. "Millennials seem to take for granted that their work and personal lives do not intersect and that their actions in one should not affect the other" (Sanchez Abril, Levin and Del Riego, 2012, p. 108). Obviously, employers have a vested interest in learning about Generation Y expectations, digital presence, work styles and lifestyles.

HRM and Social Media

The use of social media for sourcing and pre-employment screening ('online vetting') lead
to a debate among employment lawyers and human resources practitioners. Pre employment online screening exposes companies to potential lawsuits on grounds of discrimination and invasion of privacy. Equally important are concerns about fairness, ethics, equal opportunity and labor pool accessibility.
Traditionally, a written resume has been considered a standard part of 'objective'
HR hiring decision as it provides information relevant to job performance and minimizes potential claims of discrimination. Social media tools can reveal personal information about applicant's race, gender, age, disability, and ethnicity; among others. It also provides employers with access to information that otherwise they are prohibited from inquiring about (political affiliation, nationality, religion, pregnancy, marital status; to name few).
With employment lawyers advising to continue hiring based on applicants' paper resume only, many recruiters choose not to change their old practices. One reason is the generation gap; some

still learn how to navigate in the social media world. "Undoubtedly most HR managers prefer operating in areas they know well rather than in dealing with the unknown" (Martin, Reddington & Kneafsey, 2009, p.vii). However, in this rapidly changing landscape, more HR professionals report that they use social media for pre employment screening although they are aware of the potential legal risk to their organizations.

Employers who consider using social networking for pre screening job applicants seem concerned and confused as for what is right and what consists legal. Naturally, they would prefer to wait for new regulations before formally engage social media in hiring but emerging technologies and Generation Y preferences leave them with no real choice. For the young generation of job applicants, the new technologies have always existed; social media is a way of living and as such, it is expected to be part of corporate culture.

Discussion

One of the guiding rules of HRM hiring decisions is fair assessment of applicant qualities relevant to the job. In practice, human resource documentation is the key for demonstrating diversity and compliance with Equal Employment Opportunity and other US laws protecting against discrimination in the workplace such as Title VII of the CRA of 1964, ADA (American with Disabilities Act), and ADEA (Age Discrimination in Employment Act). In order to comply with the laws, an organization must be able to prove that a hiring decision was based on objective, job-relevant criteria.

Legal Concerns

Generation Y redefines access to information by blending formal and informal information; private and professional. While social networking profiles are free and voluntarily displayed (Sheppard, 2009), employment attorneys warn that using social media in hiring decisions can expose companies to potential lawsuits and wind up in violation of diversity compliance. According to these lawyers, the bases for potential legal claims resulting from screening job applicant's social network profile are: invasion of privacy, violation of discrimination laws, and the use of inaccurate information in decision making (Amato, 2011, Gansle, 2010; Jackson, 2010; Rosen, 2010).

In 2012 the media covered outrage over several US cases where job candidates were asked to disclose their Facebook username and password to prospective employers. The practice is against Facebook's terms of service as by requesting login information, employers ask the job candidates to violate their contract with Facebook. ACLU requested to stop this practice stating Facebook pages are perceived private and should be treated as a personal diary (Sullivan, 2013).

On September 27, 2012 California Governor Jerry Brown signed a bill ("Employer Use of Social Media") that restricts employer access to "personal social media" of employees and applicants for employment. Critics of this law state it does not apply to request to "shoulder surf" (Gordon and Woon, 2012). Note that in all, fourteen US states introduced 2012 legislations that would restrict employers from requesting access to social networking usernames and passwords (NCSL, 2013).

In addition to state legislations, in May 9, 2012 a new federal bill entitled "Password Protection Act of 2012" was introduced by Rep. Martin Heinrich. It was since referred to the House Judiciary Committee. H.R. 5684 (112th) seeks to prohibit employers from requesting passwords or access to social media accounts. If passes, it would also prohibit US employers from discriminating or retaliating against a prospective employee who refuses to provide access to his or her password protected social media account.

 Posting on online discussion boards, job seekers shared that they felt very uncomfortable to get 'friend request' from future bosses. Recruiters are legally advised to never 'friend' applicants on Facebook in order to access their private posts and information (Gansle, 2010). Interestingly, a

recent draft law in Germany proposed making it illegal for employers to befriend prospective employees.

Contrary to popular belief that 'cyber-vetting' won't land employers in court as claims of discrimination in hiring are difficult to prove, digital forensics tools can trace and discover anonymous searches as well as social networking involvement.

Invasion of Privacy

Many employment lawyers agree that invasion of privacy is not the main litigation risk in screening applicants' social networking profiles. The main reason is that users of social media are offered security features and privacy options that are prominent and accessible at all times." If someone is posting personal information publicly and intentionally, he cannot later complain about invasion of privacy." (West Virginia Employment Law Letter, 2009).

The general notion is that if an applicant chooses not to enable his or her profile privacy settings, there is no reasonable expectation of privacy. Shelton Hunt (2010) and Parmer (2011) warn users that everything shared on digital platforms can become public even with privacy protection. For example, when an applicant is tagged or linked by a friend whose profile is open to public access. Mayfield (2008) added that Twitter can be indexed via Google, "it's a public platform, so it's worth remembering that as such your use of it may become part of your 'permanent record'" (p. 27).

Should hiring managers assume that there is only a slight chance of legal claims of invasion of privacy? Not necessarily, although conceptualizing 'privacy' in new technologies is difficult as there is no physical space. Lawyers suggest that there might be grounds for users' reasonable expectation of privacy in the online communities as social networking promotes groups and users feel of physical proximity ('global village'). Bode (2008) described the high level of intimacy and trust shared by members of the network communities. Lau (2009) discussed the 'trusted network' aspect of social platforms where comments are geared to informal audience. Rosen (2010) indicated that a number of online social networks prohibit commercial use. Therefore, applicants can claim that their pages are private and off limits to unwelcome intruders.

An argument can be made that in the future applicants will realize the importance of separating their personal and professional lives when posting information on social networks. As such, a job seeker will carefully create a personal brand / persona and use more tools to protect his or her online privacy. Will these practices enhance HR use of social media to pre screen applicants? It is difficult to predict.

Currently, if a profile is blocked to public access, employers can still view applicants' Facebook friends. From the information found on friends Facebook and tags, one can make assumptions about the job applicant, whether accurate or not. "Held guilty by association", said Engler and Tanoury (2007, p. 66). Notably, employers report they have rejected job applicants just because their profile accounts were blocked. In these cases, employers assumed that the private setting hint that the candidate had something to hide.

Discrimination

It is widely accepted that using social media for screening job applicants expose companies mainly to potential lawsuits of discrimination. Once an employer reveals applicant's information by viewing YouTube video resume or screening an online profile, it is difficult to prove that discrimination was not involved. Jackson (2010) explained that during litigation it may be hard for employer to prove that he only viewed the information obtained in social medium but did not use it when making hiring decisions.

According to an independent Facebook guide, one-fifth of companies admit to searching Facebook profiles of prospective employees. Half of these companies claimed that what they found affected their decision to employ; "a double-edged sword" (Martin et al., 2009, p. 9). Recruiters often use

the term 'red flags' when referring to applicants lifestyle as posted on the social networks (Finder, 2006).

Furthermore, in responding to 2009 CareerBuilder.com survey of 2,600 hiring managers, forty- five percent of employers reported using social media to screen job candidates. Thirty-five percent of employers rejected applicants based on content uncovered on social networking sites (Haefner, 2009). Online provocative or inappropriate photos were the main reason of deciding not to hire applicants (Wortham, 2009). Interestingly, a number of employers rejected applicants because their screen names were unprofessional.

With social media slippery boundaries between private and public life, Facebook offers "the possibility of an uncensored peek into how job candidates act in unguarded moments" (Schepens, 2010). Applicant's lifestyle, affiliated organizations, religious beliefs, photos posted/tagged on user wall; all reveal information about the applicant which the employer could not obtain elsewhere.

Is it job relevant? Employment lawyers have opposing views on this issue.

On the one hand, lawyers argue that in making hiring decision, an employer may lawfully consider that applicant exercise poor judgment in maintenance of his or her public online persona (Jackson 2010; Steptoe & Johnson, 2009). On the other hand, several US states have statutes protecting off-duty conduct and prohibiting decisions based on candidate's lawful leisure time activities (for instance, partying and drinking). In these states, if a Facebook search reveals legal off-duty conduct, an applicant can claim he or she are victims of illegal discrimination (Rosen, 2010). Note that there is no national legislation in regard although the internet crosses state borders (Budish, 2007).

Information Authenticity and Accuracy

Another concern raised about using information found on social media is its validity. Is the information accurate, authentic, or even belongs to the job applicant? While online information can be significantly damaging, users have no real mechanism for removing photos and information exposed by others. Privacy law, in its current form is of no help for those unwillingly tagged (Budish, 2007). Adding to that, in their policies and terms of use, social networks indicate they are neither responsible nor liable for inappropriate content, defamatory comments or misuse of services. In this context, the CEO and Human Resource Management Department of Amegy Bank of Texas gained press attention when they decided to ban the use of information retrieved from social media in hiring. The bank strict policy has been enforced by blocking Amegy's internet system access to all social networking sites (Davis, 2009).

What about cases where the user is the one who posted the information? There is still a possibility that this information is misunderstood or taken out of context. Also, if used solely for hiring decision, an applicant is not given an opportunity to explain. "When the lives of ordinary citizens suddenly searchable, moments of naïveté or indiscretion become lasting reminders open to the world" (Budish, 2007, p.1881). Spon (2010) discussed the cost and accuracy of 'e.Impression', an impression of an individual that develops based on online resources. Interpretation is subjective and verification is questionable. Do comments to friends on Facebook offer insights into applicants' business communication skills? Does the number of friends one has on Facebook relevant to one's teamwork skills? How many of Facebook friends one knows in real life?

Hiring Pool

Diversity management is presented in the legal context of compliance (accessibility), employment laws (no discrimination), and business ethics (fairness, corporate social responsibility). Traditionally, human resource hiring procedures have been designed to shield and protect applicants' personal information in order to ensure equal employment opportunity. Recent practices reflect the lengths companies go through to suppress race, age and gender information for candidates and to assure access to employment from a diverse pool of applicants.

Accessibility is an essential parameter of diversity compliance in government contracts. US Department of Labor OFCCP (Office of Federal Contact Compliance Programs) is responsible for ensuring that businesses contracted with the federal government comply with affirmative action programs, equal opportunity and non discriminations laws and regulations.

Obviously, the candidate pool available through social media is limited and does not fully represent the demographics of the general public. Sourcing talent only from social media affect the chances of individuals outside these networks. Even among tech-savvy individuals, there are differences in so-called 'social media habits' (access and use) based on age, gender, race and socioeconomic status. Screening applicants from hiring pool created from social networking can result in employer's disqualification from US government contracts because of failure to comply with OFCCP diversity guidelines.

In addition to concerns about hiring pool accessibility and diversity compliance, employment lawyers argue that sourcing from professional network such as LinkedIn poses a potential risk of age and race discrimination claims due to the nature of the hiring pool. Mayfield (2008) noted that LinkedIn's future challenge is its 'closed' approach as the network was criticized for not being open enough. HR should address accessibility as a barrier for widespread integration of social media.

Equal Opportunity and Ethics

Ethics and ethical sensitivity are core values of human resource management profession where ethical awareness goes beyond legal binding addressing social responsibility and organizational culture (Clark & Roberts, 2010; Plant & Ran, 2009). Using social media in hiring decisions arise the ethical dilemma of fairness and doing right. Is it ethical to base a hiring decision on photos tagged on applicant's Facebook profile? What is the relevance, quality or value gained from information revealed online? How to justify character judgment based on private information retrieved without permission? (Engler & Tanoury, 2007). After all, the job applicant has not offered the information willingly (Budish, 2007) and HR managers have not disclosed the pre screening conduct (Parmar, 2011).

Screening applicants' Facebook pages or following their tweets is tempting. At the same time, it is speculative, unfair, and probably, does not bear relevance to the job. While it is important for companies to know who they are hiring; it leaves the job applicant vulnerable to social media screening with no consent or opportunity to respond (Lory, 2010; Jones, Schuckman & Watson, 2007; Witham, 2007). Being easily prone to bias, stereotypes, mistakes and personal perceptions, these practices can result in jeopardizing recruiters' objectivity in making hiring decisions.

Another ethical aspect is the concern that pre screening job candidates through social media encourage unethical personal branding ('clean digital trail') practices. If job seekers realize that creating positive online image/ reputation improve their chances to be hired; we might see a dramatic increase of fake, tailored, polished or artificial online personas.

Conclusion

The integration of social media in pre employment screening poses legal and ethical dilemmas for human resource managers. Employment lawyers advise against using social media in hiring decisions because of the difficulty to prove that information uncovered on social networking is job relevant (Amato, 2011, Schepens, 2010). There is a risk of "inadvertently obtain information that cannot lawfully be taken into consideration in the hiring process" (Gansle, 2010).

The ongoing debate on integrating social media in hiring indicates the complexity of the problem. For many HR managers the benefits of using social networks in hiring are almost impossible to turn down. Being aware of the potential risks, they use social media for screening applicants but don't admit doing it publicly. Other prefer using traditional practices till new rules are established. While

social media changes rapidly, laws have been slow to address and determine what is appropriate and permissible. Employment-related litigation over social media use in hiring is in its infancy.

Waiting, ignoring the situation or creating human resource policies that forbid the use of social media in hiring is neither a realistic expectation nor a solution. It is also difficult to foresee the consequences that may arise from these actions. "Ignoring the social media movement won't make it go away" (Lewis, 2010). Birkinshaw and Pass (2008) advised organizations to respond to technology changes and to the expectations of Generation Y. Further, they proposed adopting coherent and better suited practices to include social media in hiring. Having recently entered the workplace, Millennials represent a talented and well educated generation that count on digital tools. HR leaders need to be ready and willing to change, shape and adapt the workplace to their lifestyle (Burkus, 2010).

Lawyers Richer Cook (2010) and Rosen (2010) recommended that an in-house individual would conduct and report information obtained by screening candidates' online profiles. This person should not be a hiring decision maker (Amato, 2011) and should have documented training in non-discriminatory use of screening information. Willey, White, Domagalski and Ford (2012) commented on the variability in the amount and type of information available which makes standardization or comparison across the applicant pool difficult.

Kmetz (2009) argued that even with trained and careful reviewers, there should be realistic expectations and understanding of the limitations. Kmetz disputed having real standard unbiased tools to verify or assess the accuracy of sentiment information on social media. Sentiment is subjective, qualitative by nature and relies heavily on context.

Martin et al. (2009) suggested that organizations seek a comprehensive context-bound 'creative risk' solution through modification of their HR business model. Berkowitz (2009) anticipated that in order to prevent discrimination claims, more organizations would establish clear, uniformed, consistent and documented procedures for proper use of information found on social media.

Brown & Vaughn (2011) addressed the need to establish validity and job-relevance as related to information obtained from social networking sites. Segal (2011) argued that in order to limit the legal risk, social media checks should be conducted only after the candidate was interviewed and the employer determined that the individual is a viable candidate. In this case, all candidates/finalists are subject to the same social media checks at the same point in the process.

In general, laws that guide Internet use are slow. In an effort to respond to recent cases of employers requests to access job applicants' social media personal profiles, fourteen US states introduced legislations to protect social media passwords. Notably, Facebook came out publicly against this practice using its contract with Facebook users. The Department of Justice and the Equal Employment Opportunity Commission also assess if employers' who request access to applicant Facebook password are in violation of protected groups.

Human Resource hiring practices have aggregate effect on organizations' competitiveness and performance as well as on organizations' legal compliance, diversity mission, talent management and business ethics. Addressing each of these areas requires more than ad hoc practice modification; it requires an updated discussion on HRM core values and ethics. Hiring decisions need to be objective, valid and job-relevant. Adherence to these principles ensure that job applicants are treated lawfully and fairly based on their knowledge, education, experience, skills, and abilities.

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Factors of Alcohol Consumption in Modern Russia

Abstract

The goal of this project was to find out the influence of some economic and social factors on the demand for alcohol in modern Russia. The number of regression models is estimated on the base of "The Russia Longitudinal Monitoring Survey (RLMS-HSE)" 2006-2011. There are classic models of demand for alcohol of Becker and Murphy (1988): static, myopic and rational addiction models. We use two-step way of estimation because of two-step consumer decision ("to drink or not to drink" and how much to drink). The idea of this research is to use as independent variables not only economic parameters (as prices and incomes of respondent and his\her family members) but some social characteristics such as educational level, gender, age, nationality, optimism level, alcohol use by other family members, and other. The main conclusion of our research is that in modern Russia culture seems to be more important factors of alcohol consumption than the change in prices on alcoholic beverages. The influence of the consumer capital (i.e. the addiction) also is very high so we can not expect that the increase of prices on alcohol will stimulate its consumption decrease.

Key words: alcohol consumption, addictive behavior, demand for alcoholic beverages
JEL Classification: Z13, I12, D11, D12

Introduction[132]

The problem of alcoholism in Russia remains one of the most urgent in the beginning of the XXI century as well as hundred years ago. The features of alcohol use in modern Russian society make it possible to consider it as a very dangerous. Many key parameters of alcohol use and its consequences have dramatically rose during the last 20 years (volume of alcohol consumption, morbidity and mortality rates, criminality because of abusing spirits, susceptibility to alcoholism of various socially-demographic groups and population strata). World health organization (WHO) experts assert that every fifth man in Russia and the CIS countries dies of the illnesses due to alcohol consumption. According to WHO experts, annual consumption of pure alcohol more than eight liters is hazardous to health and also to human life. At the same time Rosstat[133] data show that spirits sales (in pure alcohol per capita) exceeded 9 liters a year in 2009 in Russia. But some other experts believe it to be considerably higher (up to 18 liters per capita including moonshine).
Alcohol makes fatal impact on population health, creates many social problems. As the official statistics shows, annual sales of the alcohol in Russia has grown during last 20 years (1990-2009) on 70%, from 5,38 to 9,13 liters of pure alcohol per capita. For the same time mortality rate due to alcohol has grown almost in 4 times: from 12,3 to 48,4 persons on 100 thousand of population.

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[133] FSSS, Federal State Statistics service, http://www.gks.ru/wps/wcm/connect/rosstat/rosstatsite.eng/

However according to Nemtsov's estimations, figures on mortality rate due to alcohol are strongly underestimated, as they include only direct influence of alcohol on death (i.e. an alcoholic poisoning). Nemtsov (2004) believes that about third of all death in Russia are anyhow connected with the alcohol use. Denisova (2010) research also found a very strong influence of smoking and excess alcohol consumption on the odds of death in Russia during 1994-2007. Treisman (2010) showed not only the dependence between binge drinking and mortality, but also the role of low price on alcohol as a negative factor of mortality rate on the regional level.

Consumption of substances changing of consciousness and producing the dependence effect (in particular alcohol, cigarettes, drugs) is named "addictive behavior". From the economic point of view, the use of these goods damage population health. This one, in turn, influences incomes, efficiency, expenses on services of public health system. "The total tangible cost of alcohol to the European Union as it existed in 2003, has been estimated at €125 billion, 1,3% of the gross domestic product". (WHO 2010, p.8).

Theoretical background

It is obvious that consumption of some goods have the "predilection" effect (smoking, alcohol, drugs etc.) and their consumption increase with time. This effect is often explained by *change* of tastes: the more the person listens to good music, more he or she wishes to listen to it. It is a predilection for good music. In case of consumption of alcohol, nicotine, drugs the doubtless effect is due to the medical dependence to the given substances. However economists Becker and Stigler (1977) explain such predilection without argument about change of tastes: "The essence of our explanation lies in the accumulation of what might be termed "consumption capital" by the consumer, and we distinguish "beneficial" addiction like Marshall's good music from "harmful" addiction like heroin." (Becker and Stigler 1977, p.78)

Specificity of demand for alcohol consists in addiction effect, i.e. in dependence of the present consumption on the consumption in the past. The explanation of demand for alcohol has been given in the theory of rational addiction of Becker and Murphy (Becker and Murphy 1988, Becker, Grossman, and Murphy 1994). The main feature of this model is that past consumption of some goods influences their current consumption by affecting the marginal utility of current and future consumption. This model was also generalized by Cook and Moore (2000). In the other variant of model on demand for alcohol the consumer is "nonrational" or "myopic" (Becker, Grossman and Murphy 1994), so the consumption depends only on the past but not on the future. The static model excludes both lagged and leaded consumption. But the model of rational addiction is the generalized case of "myopic" and static models. The curve of demand for alcohol has a classical negative inclination, i.e. consumption of alcoholic beverages decreases with growth of the price for them.

The rise in prices is the very important factor reducing consumption of alcohol and cigarettes. The curve of demand on addictive goods depending on the price is decreasing as it was found by Clements, Yang and Zheng (1997). The same conclusion has been made by Andrienko and Nemtsov (2005) for Russia in 1994-2003, including their estimation of cross prices elasticity. It means that tax policy measures can be effective in reduction of alcohol and tobacco consumption.

Alcohol is the normal good, i.e. alcohol consumption (in its physical amount) increases with income growth. At the same time some researchers have shown a nonlinear form of dependence between incomes and alcohol consumption. For Russia Andrienko and Nemtsov (2005) have found out U-shaped dependence between the income and alcohol consumption in 1994-2003, i.e. the poor and the rich drink more than people with the medium income. Nevertheless it is not so for USA: positive linear dependence between the income and amount of consumed alcohol was observed. One other important fact is the essential growth of expenditures on alcoholic beverages with income increase. Thus, more riche individuals prefer to increase not the amount of alcohol consumption, but its quality, buying more expensive and qualitative beverages.

Empirical researches confirmed that educational level of the consumer influences alcohol and tobacco consumption negatively. Grossman (1972) has shown that people with higher level of

education make more effective investments into health capital, and, hence, are less inclined to the alcohol and tobacco use. Within the other approach Farrell and Fuchs (1982) have shown that there is no direct influence of educational level on consumption of alcohol and cigarettes, but both of these variables are simultaneously influenced by the factor of time preference. Finally, the third explanation was offered by Kenkel (1991): influence of educational level on alcohol and tobacco consumption consists in greater awareness of educated people about negative consequences of such consumption.

There are at least two sociological explanations of people propensity to alcohol consumption, despite its fatal consequences. The first one considers drinking as the form of deviant behavior, when the individual do not respect social norms and rules (Hirschi 1969, Sutherland 1924). The second approach believes that drinking is a way of psychological state changing, mood raising, removal of pressure, weariness, leaving from problems etc. (Peirce 1994, Brody 1982). Besides addictive effect there is also an effect of "collective consumption" of alcohol, because it is a social action and drinking with friends is much more pleasantly for people that do it alone. Thus, consumption of alcoholic beverages depends not only on individual preferences, but also on social environment. The social environment can influence consumption both indirectly and directly – through availability of this good. Besides influence on the decision to drink or not to drink, the social environment can influence a choice of type of a consumed beverage.

For Russia Demianova (2005) has also found out the influence of some social factors, in particular, alcohol consumption by other family members, on RLMS data in 2000. Differentiation between alcohol consumption of different groups of population (by age, gender, residence, income level, education) were presented on RLMS data for 1994-2002 by Tapilina (2006) and for 2006-2008 by Denisova (2010b). They found out that gender, educational level and age are more influencing that income.

Methodology of the empirical research

The purpose of this research is to find out the economic and social factors influencing alcohol consumption by Russians in 2006-2011. Russian population at the age over 15 years is its object. Research problems are following:

- To estimate and compare the influence of economic and social factors on the decision about to drink or not to drink;
- To estimate and compare the influence of economic and social factors on the amount of pure alcohol consumption by the Russian population,
- To compare influence of various factors on alcohol consumption by men and women.

"The Russia Longitudinal Monitoring Survey (RLMS-HSE)"[134] is an empirical basis of this project. It represents a number of annual national representative inquiries on the basis of the likelihood stratified multistage territorial sample developed with the assistance of leading world experts in this area. Data have been collected 16 times since 1994. The most important here is the panel nature of the data that allow to use lagged variables and to test panel regressions. Besides, we have the information about other members of a family, in particular, their incomes and alcohol consumption. In the database there is information about each family member and also about household as a whole. The inquiries were spent annually from 1994 till 2011 (except 1997 and 1999). Weighted representative data are used for estimation of alcohol use, panel data - for regression analysis. The representative sample of the people over 15 years has made in 1994 8478 individuals (panel sample - 8814), in 2001 - 7195 (9917), in 2006 - 6993 (12325), in 2010 - 14462 (18086).

The methodology of estimation of demand for alcohol. In this paper, we will follow the methodology of estimation of demand for addictive goods offered by Becker, Grossman and Murphy (1994) and then developed by Labeaga (1999). Their base theoretical approach is based on

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[134] "The Russia Longitudinal Monitoring Survey of NRU-HSE (RLMS-HSE)", accomplished by the National research university Higher school of economics and Joint-Stock Company "Demoscop" with the assistance of the Carolina Population Center at the University of North Carolina at Chapel Hill and Institute of Sociology of the Russian Academy of Sciences. (Sites of RLMS-HSE survey: http://www.hse.ru/rlms, http://www.cpc.unc.edu/projects/rlms)

the model of rational addiction. Sometimes, in different papers, however, the myopic or static models are tested which use the same basic principles. This depends on the availability of data sets. But Becker, Grossman and Murphy (1994) tested the demand for tobacco on aggregate data, using information about expenditure on tobacco. They also offered a way to estimate the model with lagged and leaded consumption using the IV (instrumental variables) of tobacco past and future prices as they are not correlated with the error term. But this solution of the problem of endogenous regressors is not so easy for micro level analysis because individual past and future consumptions depend on many other parameters except prices. Only the change of price and price differences between residences can not explain the individual demand.

In addition to the problem of estimation of past and future consumptions (though these variables are available in panel data they are often considered as data with measurement error) micro data on alcohol (and tobacco) consumption are usually censored at two levels. Firstly, we can assume that an individual makes a decision on participation in the consumption, i.e. "to drink or nor to drink". The model on participation is usually tested with the use of probit regression. In a similar case related to a labor supply, this equation can be used for correcting the selection bias in the model for working hours using the Heckman procedure. It is appropriate as those people who have decided to work must allocate some time for their work. Drinkers or smokers, however, might have their consumption on a zero level, depending on the time of survey. When Labeaga (1999) analyzed the consumption of tobacco in Spain he used variable of weekly expenditure on tobacco as a depending variable. Due to the short period when surveys were conducted there were many observations equal to zero (due to the "infrequency of purchase"). That is why he proposed to use the Tobit model for the estimation of demand using the Mills inverse ratio for correction bias. This methodological approach is based on the idea of double-hurdle theoretical model.

We believe that a two-step consumer decision (to drink or not to drink and that how much drink) requires a two-step model. Firstly, we will estimate the equation of participation with a binary depending variable (=0 for an abstainers and =1 for a drinkers). Than we will calculate the Mills inverse ratio to introduce it in the Tobit model. This one is estimated for drinkers only, but the consumption of 'light drinkers' is equal to zero (as it is assumed in double-hurdle model).

The problem is that in both myopic and rational addiction models there is the endogeneity of explanatory variables being equal to the lagged and lead dependent variable. As noted Ebbes (2007), this is one of five sources of endogeneity. Some researchers used lagged and leaded prices as the instrumental variables in this case (Becker, Grossman and Murphy 1994, Andrienko and Nemtsov 2005). We also try to use regional prices as well as the variable measuring pure alcohol sales in liter (both at the regional level, for past and future) as instruments, but the results were confusing. Almost all independent variables became insignificant. So we can conclude that here prices are not the good instruments. We believe that it is necessary to use some individual parameters as instruments because variation in individual consumption could not be explained only by aggregate variable (prices and sales). So we decided to use as instrument income in the past (income in the future can not be used because it should be dependent on the present alcohol consumption), smoking in the past and in the future (smoking status as the instrument for drinking status and number of cigarettes used as the instrument for alcohol consumption), and prices and sales of pure alcohol in the past and in the future. All pooled regressions are estimated as clustered by individuals.

Measuring alcohol consumption in RLMS data. The correct estimation of the percentage of alcohol abstainers in RLMS-HSE data became possible since 2006, when the new question has been included in the questionnaire: "Do you consume alcoholic beverages, including beer, at least sometimes?" We will use this question to construct dummy variable for the participation equation (1 - drinker, 0 - abstainer). The next question is about consumption of different alcoholic beverages in the last 30 days. This question made it possible to separate alcohol abstainers from "light consumers", who drink alcohol but did not do it in the last 30 days and so their pure alcohol consumption is equal to zero.

In 1994-2005 there were two questions about every kind of alcoholic beverages: "Did you drink it in the last 30 days?", and "For those you drank how many grams you usually consumed in a day". Considering a difference of the maintenance of ethanol in various drinks (beer - 4-6%, wine dry - 10-12%, fortified wine - 15-18%, vodka and moonshine - about 40%, alcoholic cocktails - 5-15%), it is possible to estimate approximately the daily average dose of consumed ethanol. Since 2006 a question "How many days did you consume this beverage in the last 30 days?" about each kind of beverages was introduced. Therefore it is possible to calculate the amount of pure alcohol consumed (by multiplication of day dose of each kind of beverages by the quantity of corresponding days, and then summation). Pure alcohol consumption of "light consumers" (who drink but did not drunk in last 30 days) is assumed to be 1 g (so it's log is equal to 0).

Measuring explanatory variables. In its classic form the model of rational addiction use only past and future consumption, prices and income (or wage) as necessary determinants of present consumption. Other influencing factors may be not so important at the macro level. But the individual demand for addictive goods, including alcohol, depends also of some social and demographic characteristics as it was shown above. In his estimation of households demand for tobacco Labeaga (1999) and Jones and Labeaga (2003) besides income and prices used such variables as family size, parameters of the head of household, regional dummies and others. Andrienko and Nemtsov (2005) used log income per capita, prices on alcohol, tobacco and sugar, gender, age and dummies for urbanization level as independent variables in their estimation of the individual demand for alcohol.

We also included in our model the prices on different alcoholic beverages as independent variables. The information about prices on different alcoholic beverages in 2006-2011 on regional level was found in Rosstat Data[135]. All prices were deflated to the 2011 level of prices with the Consumer Price Index (CPI). We also calculated the regional price on pure alcohol by dividing the sales of all alcoholic beverages in rubles by it's volume in pure alcohol.

Some variables measuring income are used. First of all it is the real income per capita (log). Second, there are two variables: log of personal income and log of income of all other family members. Third, we try to test the square-law dependence on income using two variables: income per capita (divided by 10000) and it's square. As controlling variable we use regional income per capita. All of these income variables are also deflated to the price level of 2011 (using CPI).

Surely we take as regressors gender, age and squared age and dummies for residence type. But our general hypothesis is that besides economic factors like prices and income alcohol consumption is greatly influenced by some social characteristics, as it is predicted by sociological approach. That is why we introduce in our model some "social" independent variables such as : marital status, number of children in different age and number of adult, dummies for nationality, educational level, optimism measured as the satisfaction with life (T-1) and the anxiety about future income (T-1), health self-estimation (T-1). We also use the drinking status of spouse and other family members (in the participation model), and pure alcohol consumption by all other family members because of collective character of addictive goods consumption.

The dynamics and structure of alcohol consumption in Russia: stylized facts on RLMS micro data

According to the data, more than one third of Russian women and more than one fifth of men over 15 consider themselves abstainers. This percentage among women has grown from 31,5 to 36,3%, and among men - from 19,3 to 23,6% for the last 6 years. In the long term, the struggle against consequences of alcohol consumption in Russia is possible; it is possible to consider this fact as a positive tendency.Regarding distinctions by age, the percentage of non-drinkers is high enough among people younger than 26 years (about 40% of the group in 2011), then it falls to almost to one fifth in the group aged of 26-40 years, and rises to a quarter in the group of people of 41-60 years old, reaching almost half among older people. During the last 6 years the percentage of alcohol

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[135] Unified interdepartmental statistical information system http://www.fedstat.ru/indicator/data.do

abstainers younger than 60 were constantly increasing, and among the elderly it was growing till 2008, and then it has again decreased. The percentage of drinkers has fallen from 78 to 73 % in all cities and towns and from 65 to 61 % in villages.

At the same time there are people in Russia who generally are drinkers but they do not consume alcohol every month. In 2011 69,5% of the population over 15 years old were not alcohol abstainers, however, only 50,5 % of people were drinking alcoholic beverages within the last 30 days before the beginning of case studies. The percentages of monthly drinkers was the highest in 2001 (49,6% among women, 72,7% among men), and the lowest - in 2011 (41,9% among women and 60,8% among men).

From 1998 Russian drinkers, both men and women, began to drink alcohol more often (in 2011, an averaged Russian drinking man kissed a bottle 5,9 times per a month, and a woman - 3,1 times per month). The frequency of consumption had a small increase in the age group below 40 years old, and decreased in senior age groups. The percentage of those who drank once a month decreased strongly (from 27-30% to 17-19% in age groups under 60). The percentage of those who drank more than 4 times a week did not practically change, and the group of people drinking 2-8 times a month became more numerous. Average frequency of the alcohol use is almost the same in urban and rural areas.

As RLMS-HSE data show, after a small growth in the percentage of drinker in the mid-1990s, the recession of 1998 followed, then there were some rise in 2000-2002 and in 2006-07, and a slow decrease by 2011. These changes correlate in some extent with the growth rates of income per capita by Rosstas data (but not with a price index). This fact highlights the rather high elasticity of demand for alcohol by income and relatively low elasticity by prices.

From the mid-1990s the structure of consumed alcoholic beverages essentially changed. First of all, it concerns the growth of beer consumption in percentages (it changed from 36,4 to 64,5% among drinking men and from 16,4 to 38,2% among women). This increase occurred, apparently, to the detriment of vodka consumption (it diminished from 88,8 to 66,1% among drinking men and from 60,3 to 35,9% among women). Beer consumption also superseded the consumption of dry wine and champagne among women by 2000 (the percentage of drinkers was reduced from 53,3 to 31,4%), however, by 2011 the percentage of those who preferred these two latter beverages were escalated to 47,1%. The growth of the percentage of moonshine consumers is also clearly visible in 1998-2000 among women (from 2,8 to 10,9%), and especially among men (from 9,6 to 24,3%), this might be justified by a financial crisis and the decrease of real incomes of the population. But in 2011 only 7,3% of men and 2,7 of women consumed moonshine (among drinkers over 15).

Let's look now at the volume of alcohol consumption in terms of its equivalence to pure ethanol. We can see that every Russian inhabitant over 15 years (drinker or not drinker) drank 2,6 l of ethanol in 2006: Russian men drank 4,64 l of pure alcohol, but Russian women consumed only 0,97 l. At the same time this calculations give us lower figures that the Rosstat does according to alcohol sales (counted on all population, including babies) and those estimations are lower than that figures given by experts and the WHO. The reasons of such discrepancy have been specified in works of Cook and Moore (2000), Tapilina (2006), Andrienko and Nemtsov (2005). In particular, they had noted the high level of sensitivity of questions about alcohol consumption, the desire of people to not show the high level of it's use; the other argument is the biased samples, in which percentage of alcohol abusers (as a rule, marginal groups of population) is lower than in total population.

As the average volume of pure alcohol consumption are underestimated according to RLMS-HSE data, it can give us the idea more likely about dynamics of this indicator (growth rates), than about real volumes of the ethanol drunk by the population. Besides, this indicator can be used for an estimation of influence of various factors on consumption volume, considering displacement. Our estimation shows the decrease in consumption from 2006 to 2010 (by 15%), and then a small growth in 2011. However decrease in consumption looks more essential for women than for men.

As to distinctions by social and economic characteristics, consumption of pure ethanol is practically the same for townspeople and for countrymen in 2011; people without higher education consumed approximately on a quarter more than those who have University diploma; people in age 26-60

years consumed almost twice more than younger and older people. If we calculate the volume of pure ethanol consumption only for drinkers it will be in one and a half time higher for men and twice higher for women.

If we look at the dependence of alcohol consumption on family incomes we can see that the falling of real incomes and the decrease in volume of alcohol consumption were observed in the late nineties and in 2009-11. It was possible to observe the decrease in alcohol consumption of women from the first (poorest) group to the fourth, and then some increase, especially in the richest (tenth) group. The dependence between income and alcohol consumption of men is more complicated, however in any case it is possible to tell that dependence of volume of consumption on income the per capita is nonlinear.

Frequency of the alcohol use differs by gender: more than 73% of women drink not more often than three times a month whereas the half of men drink 1-3 times a week. The volume drunk depending on frequency of consumption is also differentiated by gender. So, men, who drink every day (though their percentage is only 3,1% of drinkers) drink almost 3,7 l of pure alcohol per month, and women (0,5 %) drink monthly "only" 1,36 l. However it is obvious that even by this self-estimation (which, as we saw above, is underestimated), men who drink 2-3 times a week and more often, consume more than 9,5 l of pure ethanol per year, that is considered critical for health by WHO experts. The dangerous norm is drunk by women who drink 4-6 times a week and more often.

In 2011 the percentage of alcohol drinkers (non-abstainer) was lower (61,4 %) in a countryside than in cities (the share of consumers made 73,5% in Moscow and St.-Petersburg, 74% - in the regional centers, 72,2% - in other cities). Frequency of the use differs not so considerably among drinkers in cities and villages, especially among men. However in countryside a men drink higher volume of alcohol than in the city: more than 0,58 l of pure ethanol in a month. It is due to the consumption structure, as on villages they drink more often a hard liquor (vodka and moonshine), than in cities.

Estimation of the participation model

Now we pass to the principal part of our study: estimation of model of demand for alcohol, including a set of social variables. Here we will discuss the results of modeling the equation of participation (table 1), for all population and for men and women separately. As it include as the independent variable the drinking status in the past (lagged variable), the IV probit was estimated with instruments log income per capita, smoking status of the respondent, log regional price on the pure alcohol, regional sales of pure alcohol in liters (all in the past period, T-1). It was found out that the risk to be drinker is higher for men, people of middle age and those who live in the regional centers. Our estimation has shown that income per capita is insignificant but log of individual income influence the participation decision positively. At the same time the effect of incomes of all other family members is negative. We use here total income but not the income per capita as we control the number of household member (separately adults and children). All this results correspond to the theoretical hypothesis.

Now we turn our attention to other additional variable included in the model. First of all there are variables on drinking status of respondent in the past and of his\her relatives in the present. As one can see, to be drinker in the past strongly increase the risk to not be abstainer in the present. This fact also corresponds to the theory of the "myopic" consumer. If respondent's spouse use alcohol, it has the positive impact on the decision to be drinker, as for as the presence of other drinkers in the household. At the same time the abstainer status of spouse is the important factor of the same status of respondent. Here, as one can conclude, we see the cross influence of two variables: marital status and whether spouse is drinker. In general, married people have more chances to drink alcohol. But it is the truth only for those whose spouse is not abstainer.

Family structure also influences the addictive behavior. There are few drinker in large households (taking into account adults only). It should be expected that baby is a good argument for woman for not to drink. But it is difficult to explain why women from households, were there are children of 1-2 years old, are more disposed to be drinkers than that ones from family without kids. Men are drinker less probably in the families with children of 7-15 years.

The educational level is a negative factor of drinking alcohol (but in static model without past drinking status it is positive). Some theoretical approach and empirical estimation have shown that for some reason more educated people should be less disposed to use alcohol. In the matter of fact, last medical researches confirmed that the moderate alcohol consumption is even favorable for health. This can explain why educated individuals do not refuse drinking. At the same time the most important harm to the health is caused not by the alcohol use, but amount of consumption. And demand model estimation shows that more educated people drink less of pure ethanol. But the university diploma is significant only for women, and technical school diploma - only for men. Employment status in the past is also a significant factor of alcohol use. The chance of drinking is higher for unemployed. We believe that unemployed Russian men should be more stressed that employed ones because of their fidelity to the stereotype that man must be the breadwinner. May be it confirms the social theory considering alcohol use as the escape from some problems and bad emotional state.

As it was foreseen, nationality is the important factor of alcohol use. Unfortunately, we have no information about people religion in these rounds; that is why nationality can be used as a proxy. As social theory says, religion creates serious barriers for some social action, including alcohol prohibition. That is why it is not surprisingly that Tatars (most of them are Muslim) both men and women are less liable to weakness for alcohol than Russians. But such dependence was not confirmed for people of North Caucasus and Volga and Russian North.

It was expected that the bad health (measured as self-estimation in the past) is a serious argument for to be abstainer, besides the influence of the great age. It was confirmed for static choice model, but in this myopic model it is insignificant. We also noted that some fact confirms the concept of alcohol use as the some sort of escape; but it is not confirmed for the variable, measuring the anxiety (in the past) about future income (as well as for the life satisfaction).

Finally, let look on the prices impact. In the model using the calculated price on pure alcohol any dependence was not found. If we include regional prices on different beverages we found some confirmation of the economic theory, because the prices on vodka and wine have the negative effect, but only for women. But the prices on beer have the positive effect on the decision to be drinker that looks not corresponding to the theory. If so all measures of tax politics aimed on reducing of alcohol use will have controversial effect.

We see here at list two possible explanations. The first one appeals to the theory of demand and supply where prices result the balance of demand and supply. Thus the higher demand on beer (i.e. the percent of drinkers) would increase the price on it. This may express the differences as between regions as between years. As a matter of fact, real prices on vodka and fortified wine were diminishing and beer price were increasing in 2006-2011 according Rosstat data. At the same time the percentage of drinkers among Russians has fallen. But the average price on beer has increase by 15%, and the average price on vodka has decrease by only 5%: at the same time the regional difference in prices was much higher. For example, in 2011 the average price on the one liter of vodka in Tatarstan was 208 rubles (the lowest), and in Kamchatka - 415 rubles (the highest), i.e. more than 2 times. The same difference was found in the beer prices (minimum - 48 rubles, maximum - 100 rubles). So, we can expect the greater impact of regional difference in price on the alcohol use.

According to the data, there is a significant correlation between prices on all alcoholic beverages, and also between prices, regional level of average income per capita and the probability to be drinker. So, in more wealthy regions the prices on all alcoholic beverages are higher as well as the percentage of drinkers, but at the same time the relative price of beer in comparison to vodka (beer price divided to vodka price) is lower. That is why the influence of prices on decision to be drinker in the model estimated is relative: for the average vodka price the influence on beer price is positive, and for the average beer price the influence of vodka price is negative. The influence of prices on the decision to drink vodka or/and beer in Russia was found by Yakovlev (2012), but it was estimated as negative. But the most important should be the influence of prices not on the decision to be drinker, but on the volume of alcohol consumed because the alcohol abuse and not

the use is the threat to the health and violence. Let us now to pass to the results of the estimation of the demand model.

Estimation of the demand model

Now we will explain the results of our estimation of demand models (tables 2, 3 and 4). Table 2 demonstrates the estimation of tobit regression, including inverse Mills ratio, for static model of alcohol consumption. So the lagged and lead consumption are not included and there is no problem with it's estimation. We found the coefficients in the model for all population (testing the influence of the log income per capita as well as the square dependence on income) and for men and women separately.

We can look now at the significance of coefficients. As it could be predicted, men are drinking more than women. Influence of age is square as it was found in the selection model. Higher education has the negative effect on the amount of the alcohol consumed (but only for men). This fact conform the theoretical idea about it. People who worked in the past (T-1) are less moderate consumers than the unemployed. Income per capita has predicted positive impact but only for women. The square dependence of consumption on income was also confirmed for the whole sample and for women. As social theory predict, there is a high correlation between the alcohol consumption of family members. The influence of family size remains significant. So, married women drink less than single ones, as well as those who have children under 1. But there is no difference between single and married men, and babies under 3 even stimulate alcohol consumption of men. May be the birth of a child can be treated as some sort of stress for fathers leading to the increase of drinking. Older children (of 7-15 years) stimulate the reduction of alcohol consumption by men. Both men and women drink less in the great families (measured as the number of adults over 16).

Nationality is insignificant for the demand model (besides woman from North Caucasus), and it means that ethnic barriers are high at the decision about drinking but not about consumption lever for those who decided to drink. As in the selection model family structure is important parameter. Health was not one of the barriers to drink, being drinker signifies also to not worry about health and not reduce the alcohol consumption. The fact of negative impact of life satisfaction (in the past) on the present consumption looks no surprisingly because the bad emotional state is predicted as the possible determinant of heavy drinking.

There are some influence of the site characteristics. So, women in the villages consume less than in the cities being the administrative center of the region. Regional unemployment rate has positive influence on female consumption that can also confirm the theory of problem escape. If there are cafes and restaurants in the site it has some negative influence on consumption, we believe that this let is possible to make alcohol use more institutionalized and less inclined to be "heavy". But our hypothesis that the presence of a stadium or a park in the sit can create an alternative way to pass the leisure was not confirmed, just on the contrary.

The influence of the prices does not confirm the economic theory. The prices on vodka and beer are insignificant (on the contrary to the selection model), and these two alcoholic beverages ensure more than 80% of all pure alcohol consumed, so the influence of its' prices should be the most important. Only the price on the fortified wine has the predictable effect but only for men; on the contrary the price on the wine under 14% influence the consumption of women positively. Some possible explanation of the price influence was given above.

The static model also show that the alcohol consumption was reduced in 2008-2011 in comparison with 2006.

But these conclusions were made only for the static model, i.e. if the effect of lagged consumption (or the stock of habits) is negligible. But the most important result of the economic theory is the addictive character of alcohol use so we can expect that the influence of habits (consumer capital) should be significant. In the micro level only panel data give us possibility to include the past consumption in the myopic model. As it was said above the estimation of such a model requires the use of instrumental variables; lagged alcohol consumption was instrumented by the lagged tobacco

use (there are very high correlation between these two variables), the lagged income per capita, regional price on pure alcohol and regional level of pure alcohol sales (in liters). The influence of lagged alcohol use was found significant and positive that confirm the theory of "myopic" consumption (table 3).

Some of the independent variables keep their significance: gender, consumption of alcohol by other family members, family size and baby presence in the households. Other are influencing only for women: income, age, marital status, nationality of North Caucasus and living in the village. Education, past employment status, life satisfaction, social infrastructure (cafes, restaurants and stadiums) became insignificant. More contradictory result is the positive influence of the Tatar nationality on the men alcohol consumption.

All prices on alcoholic beverages are insignificant in the myopic model for women. Men's consumption is influenced by fortified wine price negatively and by wine and beer prices positively. Vodka price is insignificant. These facts do not confirm the theory.

New let us see on the results of the rational addiction model testing (table 4). Lead alcohol consumption was instrumented by future tobacco consumption and regional prices on pure alcohol (T+1) and alcohol sales (in liters). Both past and future alcohol consumption has positive impact that confirms the theory of rational addiction. Alcohol use of other family member and gender, as the family characteristics and nationality for women keep their significance. But the influence of all other variable including prices is almost negligible.

Inverse Mills ratio is significant and negative in static models, what let us to conclude that estimation without this correction would bias the coefficients. In all regression with lagged and lead consumption inverse Mills ratio is significant but positive. It means that in myopic and rational addiction models there is a positive association between the stochastic components in both the consumption and the selection model.

Conclusions

So, we can conclude that we found the great influence of the set of social characteristics on the decision "to drink or not to drink". Income has the predictable impact, but the role of prices on alcoholic beverages is ambiguous. The significance of the variable in the selection models for men and women are similar (excluding education and some family parameters).

The static model of demand for pure alcohol also demonstrates the influence of many social parameters such as gender, age, family structure, nationality, life satisfaction and some other, as well as of the income per capita. Some variables measuring development of social infrastructure are also important. In the demand model the difference between the determinants of alcohol consumption for men and women is more than in the selection model. But the influence of prices on beer and vodka was found insignificant.

The myopic and rational addiction models estimation confirmed the impact of the lagged and lead consumption (so, of the consumer capital or of habits). Some social parameters keep there significance in these models but some other do not. Income influence remains positive for women only. The impact of prices in the myopic model is contradictory, and in rational addiction model is negligible. In all demand models as well as in the selection model the influence of alcohol consumption of other family member was positive.

So the main conclusion of our research is that in modern Russia culture seems to be more important factors of alcohol consumption than the change in prices on alcoholic beverages. May be the one of the most important is the collective way of this practice. The influence of the consumer capital (i.e. the addiction) also is very high so we can not expect that the increase of prices on alcohol will stimulate it's consumption decrease. The most probable in this case is the change of the structure of consumption in favor of more cheap brands of moonshine of alcoholic surrogates. But the fall of alcohol consumption need some long-term measure aimed on the culture changing.

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APPENDIX

Table 1.

Estimation of the participation model (IV), probit, all population, 2007-2011.

	All	All	Male	Female
Drinker, T-1	2,663***	2,671***	2,840***	2,549***
There are other drinkers in the household	0,193***	0,188***	0,158***	0,214***
Spouse is drinker	0,167***	0,163***	0,228***	0,151***
Spouse is abstainer	-0,116***	-0,115***	-0,141***	-0,089***
Male =1	0,079***	0,077***		
Age/10	-0,066***	-0,068***	-0,057	-0,065**
Age square /100	0,004	0,005*	0,003	0,004
Technical school diploma	-0,022*	-0,024**	-0,042**	-0,011
University diploma	-0,042***	-0,043***	-0,024	-0,045***
Log of individual income	0,006***	0,006**	0,004	0,007**
Log of all other family income	-0,004**	-0,004**	-0,005	-0,004*
Nationalities of North Caucasus (base cat. - Russians, Ukrainians)	0,080*	0,127***	0,133*	0,071
People of Volga and Russian North	-0,039	-0,028	0,043	-0,041
Tatars	-0,069**	-0,079***	-0,084**	-0,080**
Number of adults (16+)	-0,040***	-0,037***	-0,030***	-0,045***
Number of children under 1 year	-0,096**	-0,094**	0,070	-0,172***
Number of children 1-2 year	0,065***	0,066***	0,035	0,078***
Number of children 3-6 year	0,018	0,019	-0,017	0,030
Number of children 7-15 year	0,021**	0,020**	0,033**	0,010
Employed, T-1	-0,054***	-0,056***	-0,077***	-0,049**
Health self-estimation, T-1	-0,006	-0,007	-0,001	-0,005
Anxiety about income, T-1	0,006	0,006	0,011	0,003
There are fast food in the site	0,057***	0,046**	0,105***	0,020
Some State enterprises were closed here in the past 12 months	-0,022	-0,017	-0,018	-0,018
There are police office in this place	-0,040**	-0,056***	-0,011	-0,076***
Town, not the regional center	-0,054***	-0,039**	-0,055*	-0,035
Village (City - the regional center is the base category)	-0,060***	-0,030	-0,083**	-0,008
Log regional income per capita	-0,009	-0,006	-0,063	0,025
Regional unemployment rate	-0,002	-0,004	-0,007	-0,003
Log pure alcohol price	-0,002			
Log fortified wine price		0,060	0,014	0,089*
Log wine price		-0,103**	-0,035	-0,148**
Log vodka price		-0,250***	-0,155	-0,293***
Log beer price		0,353***	0,400**	0,310***
Log sugar price	0,041	0,182**	0,138	0,217**
Log tobacco price	-0,116*	-0,348***	-0,339**	-0,350***
round17	0,046*	0,056**	0,040	0,065**

round18	0,133***	0,122***	0,110**	0,126***
round19	0,117***	0,075**	0,041	0,089*
round20	0,159***	0,189***	0,165**	0,200***
Const	-0,949***	-0,631**	-0,911*	-0,426
rho	-0,628	-0,635	-0,581	-0,652
Number of observations	49486	49486	20272	29214
Prob > chi2	0,00	0,00	0,00	0,00
Wald test of exogeneity (Prob > chi2)	0,00	0,00	0,00	0,00

Here and below: *** - 1% significance, ** - 5%, * - 10%.
IV for lagged alcohol consumption (yes or no) are: log income per capita (T-1) and (T+1); smoking status of the respondent (T-1); log price on pure alcohol in the region (T-1); sales of pure alcohol in the region in liter (T-1). Dependent variable for all probit model: abstainer = 0, drinker = 1, all simple.

Table 2.
Estimation of the demand model, tobit with inverse Mills ratio, drinkers only, static model, 2007-2011.

	All	All	Male	Female
Log alcohol consumption of all other family members	0,263***	0,264***	0,261***	0,287***
Male =1	2,122***	2,120***		
Age/10	0,815***	0,807***	1,010***	0,647***
Age square /100	-0,101***	-0,100***	-0,107***	-0,096***
Technical school diploma	-0,035	-0,031	0,016	-0,054
University diploma	-0,120**	-0,119**	-0,179**	-0,102
Married	-0,067	-0,064	-0,080	-0,262***
Log income per capita	0,117***			
Income per capita (/ 10000)		0,089***	0,058**	0,122***
Income per capita square		0,000***	-0,001	-0,001***
Nationalities of North Caucasus (base cat. - Russians, Ukrainians)	-0,957***	-0,978***	-0,392	-3,068***
People of Volga and Russian North	0,137	0,136	0,157	0,107
Tatars	0,140	0,138	0,046	0,223
Number of adults (16+)	-0,314***	-0,311***	-0,311***	-0,321***
Number of children under 1 year	-0,297***	-0,304***	0,288***	-0,973***
Number of children 1-2 year	0,090*	0,085*	0,167***	0,007
Number of children 3-6 year	0,040	0,039	0,039	0,015
Number of children 7-15 year	-0,061*	-0,063*	-0,138***	0,000
Employed, T-1	0,166***	0,169***	0,194***	0,167**
Health self-estimation, T-1	0,048	0,045	0,058	0,046
Life satisfaction, T-1	-0,079***	-0,075***	-0,095***	-0,056**
There are cafes in this site	-0,227***	-0,231***	-0,190*	-0,301**
There are restaurants in this site	-0,134*	-0,135*	-0,196**	-0,047
There are parks or stadium in this site	0,277***	0,270***	0,215**	0,341***
Town, not the regional center	-0,049	-0,054	0,031	-0,131*
Village (City - the regional center is the base category)	-0,243***	-0,256***	-0,008	-0,488***

Log regional income per capita	0,154	0,144	0,086	0,248*
Regional unemployment rate	0,015	0,014	-0,010	0,033**
Log fortified wine price	-0,375***	-0,379***	-0,648***	-0,132
Log wine price	0,354*	0,347**	0,640***	-0,002
Log vodka price	0,185	0,197	0,124	0,228
Log beer price	0,000	0,010	0,433	-0,357
Log sugar price	0,818***	0,816***	0,190	1,382***
Log tobacco price	0,333	0,312	0,231	0,466
Mills inverse ratio	-0,825***	-0,826***	-0,825***	-0,799***
round17	-0,036	-0,034	-0,093	0,004
round18	-0,431***	-0,420***	-0,220**	-0,618***
round19	-0,514***	-0,501***	-0,259*	-0,760***
round20	-0,462***	-0,446***	-0,464**	-0,482**
Const	-5,311***	-4,209***	-1,111	-5,338***
Number of observations	34503	34503	15626	18877
uncensored	26789	26789	13382	13407
Prob > chi2	0,00	0,00	0,00	0,00
Pseudo R2	0,06	0,06	0,03	0,04

Dependent variable for all tobit model is log of monthly ethanol consumption, drinkers only.
For light drinkers pure alcohol consumption is equal to 1g (log alcohol consumption = 0).

Table 3.
Estimation of demand model, tobit with inverse Mills ratio, drinkers only, myopic model IV, 2007-2011.

	All	Male	Female
Lagged log alcohol consumption	0,967***	0,946***	1,078***
Log alcohol consumption of all other family members	0,161***	0,159***	0,164***
Male =1	0,602***		
Age/10	0,224***	0,105	0,301***
Age square /100	-0,034***	-0,016	-0,044***
Technical school diploma	-0,014	0,013	-0,025
University diploma	-0,008	0,061	-0,073
Married	-0,119***	-0,040	-0,201***
Income per capita (/ 10000)	0,037***	0,027	0,041**
Income per capita square	0,0001*	0,000	0,000
Nationalities of North Caucasus (base cat. - Russians, Ukrainians)	-0,358**	0,057	-2,148***
People of Volga and Russian North	0,011	0,035	0,020
Tatars	0,194**	0,281**	0,077
Number of adults (16+)	-0,173***	-0,169***	-0,174***
Number of children under 1 year	-0,281***	0,175	-0,732***
Number of children 1-2 year	0,276***	0,174***	0,417***
Number of children 3-6 year	0,000	0,057	-0,062
Number of children 7-15 year	-0,031	-0,055*	-0,006
Employed, T-1	-0,057	-0,030	-0,081
Health self-estimation, T-1	0,010	0,036	-0,006
Life satisfaction, T-1	0,003	-0,003	0,012
There are cafes in this site	-0,020	-0,029	0,013
There are restaurants in this site	0,026	0,036	0,053

There are parks or stadium in this site	0,017	-0,026	0,070
Town, not the regional center	0,030	0,148***	-0,052
Village (City - the regional center is the base category)	-0,098*	0,090	-0,271***
Log regional income per capita	-0,070	-0,157	0,041
Regional unemployment rate	-0,019**	-0,029**	-0,015
Log fortified wine price	-0,070	-0,295**	0,151
Log wine price	0,130	0,464***	-0,226
Log vodka price	0,032	-0,110	0,078
Log beer price	0,160	0,821***	-0,465
Log sugar price	0,635***	0,355	0,810***
Log tobacco price	-0,334	-0,410	-0,209
Mills inverse ratio	1,373***	1,735***	1,372***
round17	-0,053	-0,100	-0,026
round18	-0,141**	-0,077	-0,196**
round19	-0,131	-0,102	-0,160
round20	0,025	-0,079	0,087
Const	-2,596***	-2,349**	-2,130**
Number of observations	32482	14584	17898
uncensored	25176	12482	12694
Prob > chi2	0,00	0,00	0,00
Wald test of exogeneity (Prob > chi2)	0,00	0,00	0,00

IV for lagged log alcohol consumption are: log income per capita (T-1); number of cigarettes used (T-1); log price on pure alcohol in the region (T-1); sales of pure alcohol in the region in liter (T-1).

Table 4.
Estimation of demand model, tobit with inverse Mills ratio, drinkers only, rational addiction model IV (two step estimation), 2007-2010.

	All	Male	Female
Lagged log alcohol consumption	0,562***	0,600***	0,589***
Lead log alcohol consumption	0,423***	0,338***	0,498***
Log alcohol consumption of all other family members	0,124***	0,119***	0,136***
Male =1	0,475***		
Age/10	0,040	-0,068	0,084
Age square /100	-0,009	0,007	-0,016
Technical school diploma	-0,018	-0,028	0,019
University diploma	0,011	-0,021	0,050
Married	-0,024	0,078	-0,139***
Income per capita (/ 10000)	0,030*	-0,005	0,052**
Income per capita square	0,000	0,000	0,000
Nationalities of North Caucasus (base cat. - Russians, Ukrainians)	-0,314*	-0,009	-1,715***
People of Volga and Russian North	0,001	-0,068	0,089
Tatars	0,324***	0,264*	0,367**
Number of adults (16+)	-0,137***	-0,128***	-0,148***
Number of children under 1 year	-0,397***	0,009	-0,865***

Number of children 1-2 year	0,144***	0,069	0,203**
Number of children 3-6 year	0,037	0,066	-0,007
Number of children 7-15 year	-0,019	-0,058	0,016
Employed, T-1	0,029	0,092	-0,037
Health self-estimation, T-1	0,031	0,075*	0,001
Life satisfaction, T-1	-0,006	-0,017	0,005
There are cafes in this site	0,024	-0,037	0,097
There are restaurants in this site	-0,065	-0,107	-0,012
There are parks or stadium in this site	0,066	0,051	0,082
Town, not the regional center	0,058	0,089	0,059
Village (City - the regional center is the base category)	-0,016	0,162*	-0,154
Log regional income per capita	0,082	0,128	0,070
Regional unemployment rate	0,000	-0,006	0,001
Log fortified wine price	-0,002	-0,206	0,164
Log wine price	0,131	0,332	-0,047
Log vodka price	0,066	-0,082	0,178
Log beer price	-0,482*	-0,015	-0,860**
Log sugar price	0,131	-0,315	0,377
Log tobacco price	-0,010	-0,027	0,073
Mills inverse ratio	0,802***	1,089***	0,784***
round17	-0,084	-0,168**	-0,034
round18	-0,141*	-0,067	-0,185*
round19	-0,016	0,088	-0,109
Const	-0,953	-0,122	-1,360
Number of observations	20824	9160	11664
uncensored	16296	7919	8377
Prob > chi2	0,00	0,00	0,00
Wald test of exogeneity (Prob > chi2)	0,003	0,009	0,003

IV for lagged and lead log alcohol consumption; instruments are: log income per capita (T-1); number of cigarettes used (T-1) and (T+1); log price on pure alcohol in the region (T-1) and (T+1); sales of pure alcohol in the region in liter (T-1) and (T+1).

Jiri Rotschedl

Impact Non-Price Factors of Marketing on Utility Maximization of Consumer

Abstract:
This Paper deals with the consumer theory and particularly with the impact of marketing on utility maximization of the consumer. Contribution is mainly methodological. The aim of the paper is to use indifference curves and their slope changes to illustrate how marketing (no price factors) affects a consumer.

Mohammad Safhi

Personnel Preparation Programa in Visual Impairments in Middle East

Abstract:

Approximately 35 million people who are blind or visually impaired live in the Middle East. The number of people with visual impairments continues to grow in this area. Therefore, to meet the needs of this growing population, a need for more teachers of students with visual impairments (TVIs) exists. However, special education programs, especially for TVIs, are still new in the TVIs. Some of Middle East have special education programs at the university level to prepare educators of students with special needs, and most of these university programs do not have personnel preparation programs in the field of visual impairment or other disabilities. Most of these countries provide services to students who are blind or visually impaired in separate residential settings such as the Al-Noor Institute for Blind in most Arabic nations. The purpose of this study was to examine the teachers personnel preparation training programs in the field of visual impairment in the Middle East. This study used an online survey as a method to collect data. Twenty-six (26) professionals (professors and educators) participated in this study from a variety of programs including university programs and agency programs. The results provided useful information to universities and agencies in the Arabic countries to develop, improve, and maintain more effective TVI training programs. However, this study´s results identified a shortage of teacher training programs for TVIs in the Middle East, so there is a significant need to develop and increase the number of professional personnel preparation programs to prepare TVIs in these countries

Apkar Salatian

Jelena Zivkovic

Tele-monitoring of Buildings for Developing Countries

Abstract

Building Tele-monitoring involves building staff located at a remote location providing advice to builders in multiple, scattered buildings using computer and telecommunication technology. Building Tele-monitoring is most beneficial for populations living in isolated communities and remote regions such as rural sub-saharan Africa where there is shortage of trained building operators to manage highly complex buildings safely and efficiently. In this paper, we propose a low-cost Building Tele-monitoring system to allow data from the monitors of a rural building to be transmitted and received by another location anywhere in the world where an expert can provide advice remotely. Our system is based on the Model-View-Controller design pattern and uses the internet as the form of communication.

Evren Şar

The Primary Education in Ancient Athens

Abstract:

The main purpose of the study is to draw a picture of the education system in terms of the curriculum, the physical condition of schools, the attitudes of the teachers and the perspective of the society towards education in ancient Athens. Education was an important issue for free Athenian citizens. Athenian children were taught at home, sometimes under the guidance of a master or "paidagogos", until they began elementary education at approximately seven years of age. At school, the children were taught how to read and write, to count and draw. In this study also the importance of the "paidagogos" and the family structure in the education of the primary school students is investigated.

In doing so, the body of the study is based on a literature review, where available the modern sources has been supported by the ancient sources.

Keywords: History of education, Ancient Age, Athens, Primary education,

Tanja Sestanj-Peric

Sandra Katarina Kukec

The Role of Controlling for the Development of Planning, Information and Reporting Systems in SMEs

Abstract:
In this paper we analyze the application of Controlling in Croatian SMEs by investigating the development of Planning, Information and Reporting Systems. Controlling is an English term mostly used in the German–speaking countries (but also in Croatia) describing the field that would in international discourse be labeled as management accounting. Our research takes into consideration the specifics of Croatian companies, emphasizing the fact that the development of Controlling in Croatia is in the early stages compared to the German-speaking countries. The level of development of planning, information and reporting systems was investigated for the following reason: when Controlling is introduced into SMEs the emphasis should be on the preparation of information necessary for the management, and on the use of appropriate methods and instruments of Controlling. The design of planning, information, and reporting system enables that.

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Ali Simsek

Eylem Simsek

Transformation of Identities in the Mediated Landscape of the Network Society

Abstract:
Emerging communication technologies have changed both individuals and societies dramatically. With the diffusion of digital technologies in daily life, all users have been forced to create new identities for themselves. Thus, everybody had an additional self in virtual worlds. The users started to communicate with others through their self-made identities proving that technology started to shape our lives. Sometimes this new identity has reflected the real self of individuals while some other times it has been created with no actual reference to the realities of its holders in the physical world. However, one thing is clear: Most users of virtual environments have developed multiple identities and these identities have inherently transformed who they really are. Considering that the contemporary society is an increasingly network society, human beings try to accommodate their social needs through interaction with companions in the mediated environments whom they often don´t know at all. Technology plays a mediating role in this sense among people who are temporary companions but actual strangers for each other. Moreover, people think that if they can accommodate their social needs through the net characters, whether they are real or not, then they ask themselves: Can we escape from humans who demand intimacy and find risk-free virtual buddies? The search in this regard has even prolonged to sensitive robots as social partners. This paper discusses how this inner transformation of identity has occurred and what the future holds for communication in the mediated landscape of the network society.

Ali Simsek

Facilitating Interpersonal Communication in Virtual Environments

Abstract:
Interpersonal communication is defined briefly as communication between few individuals in close proximity where all senses involve and immediate feedback is provided. Some authors contend that interpersonal communication also involves some level of maturity in relationships. In recent years, however, virtual communication technologies have been developed and used commonly so that the element of physical proximity has been replaced with functional proximity in the form of social presence. The involvement of senses in communication is facilitated through the use of emoticons. Immediate feedback still takes place but it is empowered with multimodality of messages. These radical developments have added new dimensions and raised important issues in interpersonal communication. It is also discussed whether this kind of rapport in virtual environments can be considered interpersonal communication. This paper discusses how the nature of interpersonal communication has changed with the new media and what should be done to increase the effectiveness of interpersonal communication in virtual environments.

Dusan Soltes

Some Experiences From Painful Transformation of the CEEC Countries From Their Former "Inefficient" Command to the Modern But Often Fraudulent Economy

Abstract:

The paper deals with some of the most complex problems of transition of the former socialist countries in the CEEC - Central and East European countries from their previous "inefficient" socialist economy to the modern capitalist market economy in the conditions of the regional integration within the EU. In addition to many problems linked directly to the complexity of this transformation itself, the entire process has been further made even more complex by some other in parallel running processes like transformation from the previous one party political system to the so-called multiparty "democracy". These very complex processes have further been made even more complex and painful by the fact that many of the CEEC countries had at the same time to go through another very demanding process i.e. building their independent statehood after breaking away from their previous multinational states like in the former Soviet Union, Yugoslavia, Czecho-Slovakia, etc. And in order to make it even more complex, in parallel there has been running a process of integration of thee new market democracies into the regional and global structures like e.g. the EU, NATO, OECD, UN, etc.

Key words:

Market economy, command economy, regional integration, economic and political transformation, European Union and its eurozone, voucher privatization

1. INTRODUCTION AND SOME BACKGROUND INFORMATION

Within the last 20-25 years the CEEC have been passing through a very complex and complicated process of transformation from their former socialist command economy that has been often criticized for its inefficiency and various other shortcomings - after all that that finally also contributed to the total demise of the socialist system and its command economy - to the modern capitalist market economy . But now after more than 20 years of that transition to the market economy the experiences are very often quite mixed ones and less than satisfactory in comparison what has been originally expected from the new system after the 40 or so years of the socialist one party domination with its command economy.

The CEEC are nowadays very often for various reasons of objective but also subjective reasons more experiencing many of the potential negatives of the market economy than its benefits. There is a relatively high unemployment, the former socialist property has been privatized in a way that is often called just as a total fraud on the people who have that enormous amount of the former national/state property created. The former relatively highly developed industry has not been existing anymore and the countries are fully dependent in this respect on the FDI and/or imports of often very questionable

quality. Especially the FDI are often instead of expected positives bringing just a lot of new and before unknown problems like huge lay off of workers under the pretext of their redundancy, inefficiency, over employment and subsequent huge and before absolutely unknown unemployment, high productivity especially in the traditional assembly plants but with very low wages, etc. On the other hand there are offered huge incentives for investors, tax holidays and then shortage of tax incomes for the state budgets, etc. In view of this and many other problems the standard of living for a big portion of the society have been often still lower than before this ongoing and never ending transition with its permanent inflation and monopoly high prices dictated by the international monopolies, etc..

The following parts of the paper in more details deal just with some selected problems of the transformation of the CEEC countries to the modern market economy in the conditions of their integration to the EU internal market and some other regional and global organizations and structures, etc.

2. SOME MOST VISIBLE FACTORS AND MAINLY PROBLEMS OF THE PAINFUL TRANSFORMATION TO MARKET ECONOMY IN THE CEEC

In the following parts of this chapter we deal in more details with at least some of the most typical problems and weaknesses of the ongoing painful transition to the multiparty democracy and especially to the modern capitalist market economy at least to such an extent as it is possible within the required scope of this paper.

2.1 PRIVATIZATION AS ONE OF THE FUNDAMENTAL BUT ALSO MOST PAINFUL AND FRAUDULENT TRANSFORMATION PROCESS TOWARDS THE MODERN MARKET ECONOMY

Especially in the first years after the total demise of the socialist system in the CEEC, a massive process of privatization of the former state property has been launched and to some extent it has not been completed even until now. Because also to some paradoxical situation, that inefficient command economy has created such huge properties that there is still something that could be privatized and/or as some cynics call it " to stealing or robbing" it. In different countries it has had some specific but the common ground has been that the previous state property in many cases has finished in the hands of the new "private owners" who were nobody else as in many cases their previous socialist party nomenclature cadres with all their shortcomings and inefficiency that finally led also to the demise of the entire communist system. In a very short time after such a privatization, many previously somehow running companies were on the brink of the collapse and bankruptcy. And thus instead of creating the so called "domestic national capital generating class of new capitalists", their newly and cheaply acquired private properties were soon either completely robbed or in the better case offered for the sale off to foreign investors very often for the fraction of their real market value. It is no surprise that the foreign investors very often came as "savers of the last resort" of such on the verge of bankruptcy being former socialist and then newly privatized companies. They have taken all possible benefits in the form of various incentives, grants for "creation of new or keeping existing jobs", have taken several years of tax and other related holidays, etc. And finally when all these and other perks have expired they have just moved further to the East for even cheaper labor, lower costs, etc. having left behind them just closed production facility, unpaid wages and other social payments and contribution and mainly unemployed their former employees.

However, the biggest fraud in the process of privatization has been made on ordinary people i.e. the former so-called "owners" of the socialist national property. For example in the former Czecho-Slovakia their compensation has been organized through the so-called "voucher" privatization i.e. every citizen could for some nominal fee acquire then for free shares of privatized companies in the nominal value of 10K Koruna i.e. in the particular conversion exchange rate to Euro it represented an

amount of about 330 Euro?! In many cases like in the case of the author who was contributing to the creation of that former socialist national properties for 25 years with the salaries of about double of that time average salaries and of course paid the adequate taxes to the state budget it represented a "reward" and/or compensation of about 13.20 Euro per year?! And of course those shares acquired through this voucher privatization have mostly never brought any dividends or other income as most of particular companies being offered for the voucher privatization have soon been in the above mentioned process of bankruptcy or other forms of closure or just simply have not existed anymore, etc. In this way, millions of the "new owners" of the privatization vouchers have been gradually striped off their newly acquired private property that has represented billions of Euro value of the former socialist so-called national property. In many cases, that all has just simply disappeared in the hands of often very doubtful new domestic or foreign capitalists. And in order it would not be the end of the entire voucher privatization, many owners of the absolutely no value have even now to pay "maintenance" fees for so-called administration of their totally worthless shares often not existing companies. Not surprisingly that many authors call this process of the privatization as a fraud and robbery of the millennium as such chance could happen really only once in generations and the entire region as a Wild East.

2.2 UNEMPLOYMENT AS THE MOST PAINFUL CONSEQUENCE OF THE ABOVE PRIVATIZATION AND TRANSFORMATION TO MODERN MARKET ECONOMY

In view of the above "wild" and fraudulent privatization in the CEEC countries, a lot of the former maybe mostly not the most efficient production capacities have just gradually disappeared and thus left out enormous numbers of the so-called "redundant" workforce, jobless and unemployed in the countries that have never before had known such problems. It is quite common that the unemployment has officially been up to 25-30 per cent of the total workforce. However, even nowadays it has still been relatively too high being in different CEEC countries between 10-25% in spite of the fact that hundreds of thousands have - within the EU free movements of persons - found often not the jobs within their qualifications but at least some although less qualified but still better paid jobs than in their home countries of the CEEC region. Luckily enough that this kind of free movement has existed as otherwise the unemployment in many countries would be hovering close to the catastrophic levels of over 30-35% what already represents numbers that are really threatening by serious social unrests, enormous criminality etc. Of course again the most negatively effected are people of older age groups who lost their share on the national property in the above wild privatization and then also any social guaranties as in the age of 40 plus it is often very difficult to find a job and also to go to work as a foreign worker abroad even within the above EU free movement of persons. The former socialist countries thus are nowadays loosing several times enormous financial and human resources as mostly well qualified young people being educated home are working and contributing to the growth in their new countries of work. While older people are left on the unemployment "benefits" or minimal pensions as there is a popular saying that the society in general becomes older and ther is not enough resources for their better pensions. But again the problem is not that objectively people live longer but the real problem is there is not enough young people who would be working home and thus in the kind of a solidarity would be contributing to the pension funds as it was before this transition. Many young peole are either abroad or unemployed and many of them are unfortunately forced to various anti-social activities such as prostitution, criminality, drugs, etc. what is just further negatively effecting the overall socio economic situation in the CEEC that never before has been existing in such a huge scope.

2.3 NEGATIVE CONSEQUENCES OF THE MODERN MARKET FORCES ARE THE SAME AS IN THE OLD CAPITALISM – PROFIT BY WHATEVER WAYS AND MEANS

In view of the above still rather huge unemployment the functioning of the market economy has been further contributing to the very negative socio economic development in the CEEC as the higher unemployment means not only above negative consequences but also many subsequent ones. It is a vicious spiral that the higher unemployment and thus also lower incomes mean also lower domestic consumers demand and thus also lower demand for production, quality of production, less pressure for innovations, etc. That finally again forces companies to the reduction of production and thus also further lowering their demand for employing new workforce, etc. It is again one of the paradoxes of the market economy in the CEEC region that although the economy has been in many cases growing faster than the average of the EU or OECD, etc. such a positive macroeconomic growth has not generated any new jobs as normally it is the case if the economy growth. It looks like that it is growth for growth for statistics of the EUROSTAT, WB, IMF, OECD and other international organizations but not for the people of the particular CEEC

Those who are luckily enough having jobs have under such situation a much lower chance for more adequate wages, less intensive work, better social and health benefits, etc. basically the employers could dictate very often very tough conditions for their employees who have to be happy to have any job as there is a long cue of unemployed who are ready immediately take over any job after those who would like e.g. to apply in practice one of their fundamental human rights like e.g. a right to strike, etc. that otherwise is a very popular and almost a national hobby in many old EU member states. Although the productivity in the CEEC has nowadays reached almost the levels in the old EU member states the wages are just a fraction of the salaries of their partners in the same companies being based in their home countries in the EU old member states. In general the wages in the CEEC region are representing for about the same quality and capacity of production only about one quarter or one third of the wages of their colleagues in the old EU member states. This situation has then also negative consequences on many aspects of the standard of living in the CEEC. If we take only e.g. quality of food we could say that the quality of the food in the CEEC is much lower than in the rest of the EU. As the consequence of the lower purchasing power in this countries a lot of the food stuffs in the CEEC are of a lower quality, made of lower quality components, being before expiration of the period for consumption, with various doubtful substitutions for more healthier or nutritious foodstuffs by their less qualitative but cheaper substitutes. It is then no surprise that the CEEC in the recent years have often become a dumping area for a less qualitative foodstuffs and other commodities.

That could be illustrated by some of the most recent affairs in this respect like e.g. an import to the CEEC of several times repacked chickens being after their original expiration dates, poisoned chicken eggs, a cooking oil with dangerous carcinogen substances in it, rotten or otherwise damaged vegetable and fruits, alcoholic beverages not only with ethanol but also with killing methanol, etc. It is especially the case of the agro products as due to the much lower subsidies to agriculture in the CEEC countries in comparison with their counterparts in the old EU states and also the higher taxation of foodstuffs, the former highly efficient socialist big agricultural farms cannot just compete with their competitors from the other part of the EU common market within its free movement of goods. Thus the CEEC region also for this reason has become an area with enormous and normally unnecessary imports of all various agri commodities like eg. even potatoes that are now imported even to such countries like Slovakia where have always been almost ideal conditions for growing potatoes serving even for a solid export but now the country has become an importer of this staple even from such untypical potatoes countries like France, Germany, Belgium, Italy, etc. and of course in prices that are quite naturally sometimes more higher than from the domestic production. And such examples we could bring much more from various other parts of the "functioning" of the EU common market!

2.4 FRAUDULENT MARKETING AS ONE OF THE MOST NEGATIVE ASPECTS OF THE ENTRY OF THE MODERN MARKET ECONOMY

One of the most negative consequences of the modern contemporary market economy that has come to the CEEC together with all other processes of transformation has also been the modern marketing methods and techniques that are really representing almost scientific perfection of the manipulation with potential customers and clients. In this respect they clearly violate any even the minimum standards of the protection of consumers as it has been enshrined in the EU "acquis communnautaire" i.e. the EU community legislation on the protection of customers. In this respect it is necessary really to hail the stance of the EU institutions that has been demonstrated also by such an important fact that there does not exist any possibility for funding any project related to marketing from the EU funding schemas.

The generally negative consequences and impact of the often very fraudulent marketing have been further enhanced by the fact that the population of the CEEC have for years of their socialist system been almost absolutely freed of any not to mention a fraudulent marketing. It is therefore just an undeniable fact that this kind of the mostly fraudulent marketing has managed to cause especially at the beginning of the process of transportation a lot of severe damages of the moral, financial and various other damages. One of the most typical practices of this kind of the marketing has been the fact that in many cases it has led to the total and/or very serious misunderstanding from the side of the potential customers, clients, etc. In many cases it is hardly believable that somebody could become to be attracted by such various unfair fraudulent marketing practices. For example to this author so far nobody has explained what is the difference between the popular marketing slogan like e.g. for cars with four wheel drive a typical marketing slogan is in this respect "All wheel drive"?! Have anybody ever seen any (personal) car with more than four wheels?! Or all those on the miraculous training machines, instruments. tools, nutritious supplements (often of the most dangerous doping substances otherwise fully prohibited even for the professional sportsmen) that in a few weeks or maximum couple of weeks they manage to change your body from of whatever shortcomings to the bodies of the most famous bodybuilders or movie super stars, etc. they are of course demonstrating those advertisements. And of course that all can be achieved only for the fraction of the normal price "now only being available for the miraculously low prices of only particular absolutely lowest price ending by .99 and of course call now! Especially dangerous are these fraudulent practices of the modern marketing for the young people who are most eager to believe all those stupid, silly promises, etc. With this kind of fraudulent marketing very closely has been associated also the common practice to use even the youngest children for marketing and advertisement practices although it has to be clear to any company and producers that misuse of children for commercial purposes has been for years already forbidden by the United Nations Convention on the Rights of Child that has been ratified by all countries in the world but two! And the child has been there defined by the age of 18 so any misuse of children in this respect is a clear violation of the particular UN Convention but … who cares if it is going about achieving the highest profit margin?!

We do not need to go any further about the fraudulent marketing and advertisement especially by some companies from pharmaceutical industry. They are one of the most aggressive on the TV screens regarding miraculous effects of all possible and impossible medicines and cure elements being freely available for sale without medical prescription but if you want to use it you have to read at least 3-4 pages of instruction that are warning you about all possible and impossible negative consequences on your body even in case of such a common medicine like ordinary pain killers, but… The most important is that you have already bought it in the good belief that it will do everything as you have seen it in the expensive TV promotion shots. And it is clear that all those very expensive advertisements have to be paid by patients through still more and more expensive medicines and that all in the countries where just quite recently the health care and also education has to be according to the national constitutions still – at least nominally and on "paper" but unfortunately not in reality - for free?! Among most popular fraudulent marketing practices belongs such methods like the same price but for a smaller product or even lower price but disproportionally much smaller or less quality product

where banana in chocolate is substitute by only a banana flavor, etc. and so on. It could be possible to mention here also unfair practices of marketing regarding the misuse of the most modern and fashionable social networks but the size of the paper does not allow us to cover all the negative consequences of the fraudulent marketing and advertisement of the contemporary market economy that is dangerous especially in the CEEC countries. They just for generations have not been used to withstand such a primitive but finally efficient pressure. Its substance is just simple convince you to buy anything whatsoever, just buy it, the rest is then already your own problem. After all, nobody has been and/or could force you to anything we are just a part of the market economy and democracy where everybody is responsible for its destiny!

2.5 EURO AS A VICTIM OF THE IRRESPONSIBILITY OF THE EU INSTITUTIONS, MEMBER STATES AND FRAUDULENT PRACTICES OF ALL KIND OF VENDORS

One cannot deny the fact that sometimes even the best intentions like it has been in the case of the Euro as a so-called "common currency" of the EU finally could not meet its original objectives and could be misused for something completely else. First not so correct is the term of the "common" itself as even after more than decade it is common still just for 17 out of 27 EU member states and then there are following many other aspects that unintentionally makes of Euro an instrument of the potential and not only potential fraud. The main of them are as follows:

- In spite of their relatively high value the Euro coins almost automatically create an perception that it is just a coin i.e. a small change so people are paying by them also the relatively high prices that otherwise would look to them as too high. We have to realize that the highest value coin is 2 Euro what is a relatively a big value if compared with the US$ that has the highest coin as a half dollar and already 1 US$ is a banknote although 1 Euro is now about 1.25 US$. This simple fact leads costumers to be less conscious on the real fact of the particular price that automatically looks like penny price although in fact it is much higher. For example also in case of Slovakia such a small chcnge like a coin of 1 Euro represents a forme 30 Koruna what was already an amount that was considered differently than now it is with a small change in a form of a coin
- This fact is especially attractive for all kinds of vendors and sellers as it is very easy to "rounding" prices to some more specific prices while for customers it is still just a case of some "pennies" that are not worse of any specific concern
- Some vendors like in the oil industry they go even that far that they quote their prices not in real Euro values but in fraction of them although in reality one Euro consists only of 100 cents but the prices as a rule are displays up to 999 cents per liter?!
- As a consequence of this games with Euro the prices since introduction of Euro have sky rocketed up to the previously unbelievable high levels. For example while in Slovakia on the day of introduction of Euro on the 1 January 2009 the exchange rate was 1 Euro to 30, 126 former Slovak koruna now just less than three years that original exchange rate remained only for salaries and other incomes of citizens while the prices are nearing to 1 Euro to 10 Koruna in common prices while in some relatively low prices in and around 1-2 Euro coins the trend is already in many cases equal to the exchange rate of 1:1 and/or very near to it as e.g. all prices that before were bellow 10 Koruna i.e. about 33 Euro cents do not exist anymore and the lowest most common prices are mostly on the price tag of 50 or more cents.

Again for the required scope of the paper we cannot go into any elaboration regarding all other negative aspects of Euro that finally led after less a decade to the current stage when the very existence of the so much hailed common currency has been on the verge of the total collapse and demise earlier than it could celebrate its 10th anniversary of its birth when even a special champagne wine has been introduced. To our knowledge there has not been any celebrations of the first decade of its existence and most probably nothing similar has been planned for the near and not so near future!

2.6 ENERGIES IN GENERAL AND THE CRUDE OIL IN PARTICULAR AS THE REAL PARADISE FOR ANY POSSIBLE FRAUD ON CUSTOMERS

If anything could be presented as a typical example of the fraudulent activity of the contemporary market economy, then we cannot find any better example than it is the energy sector and in particular its most attractive part i.e. the oil industry. And again of course the main victims of any fraudulent behavior are if not all but definitely some of the CEEC including of course also of the Slovak Republic. In this connection it is necessary to state at the beginning that the main energy commodity supplies (a crude oil, gas) have been still provided like before through the special pipelines from the former Soviet Union i.e. nowadays from the Russian Federation and it is also necessary to state that these supplies are provided on the long term contracts so no specific spot volatile daily changing prices from the commodity stock exchanges are applicable. But it would not be a modern market economy if also in such situation it would not find ways and means how to increase the prices for these so-called "black gold" commodities. In spite of the above specifics of the supplies of them on the basis of the long term contracts the market prices in the CEEC countries are derived from the spot prices on the commodity markets in Amsterdam, London, etc. In principle as a rule there is always quoted a price on that one market among them where the spot price for the delivery within some weeks or days are going up. It is interesting that those prices are regarding of the crude oil that has nothing to do with the Russian oil but it is e.g. the North Sea's Brent or whatever other kind of the crude oil but definitely not the Russian one. The other fraudulent market price policy in this respect is the fact that those prices from the spot markets are quoted only when the prices are there going up. In such case the increase of the price is implemented immediately although according the particular market rules that price is quoted for some future delivery in weeks or months. But when there is the opposite trend and prices e.g. in Amsterdam or London or wherever else are going down then it is called just as a "temporary" turbulence on the markets and our prices in the CEEC are that case absolutely stable i.e. remain higher than those declining spot prices. And if finally prices also here have to go down then only by 1-2 cents/litter while when going up the immediate increase is usually by some multiplier of these decreases.

Hence thanks to these simple – fraudulent - market and marketing policies these commodities are extremely expensive in the CEEC countries. In addition to these fraudulent manipulation with the different kinds of the crude oil prices, there is an enormous tax burden on the prices so finally the final price of petrol for drivers e.g. in Slovakia is much higher than in all neighboring countries in the region including Austria with its salaries being higher than here by about 3-4 times in average. The main paradox in this case is that the same petrol on the both sides of the common border is often from the same refinery. That is also the proof of the common knowledge that some governments do not miss any chance to grab from their citizens whatever higher profit through not only higher basic prices but also adequate taxes and their cumulative effect. Absolutely specific in this connection is the reaction of the oil prices here to any potential or real disaster or instability wherever in the world that immediately are used as a good excuse and a good reason for a substantial increase of oil prices. For example when there was the Arab spring revolt in Libya the prices of course went up immediately although the total export of crude oil from Libya has been only about 2% of the world oil market but its impact on our prices was immediate and much higher than those two per cent. And again it has happened, in spite of the fact that Libyan oil has absolutely nothing to do with our import of that commodity directly from Russia. Or if anything happens in any other OPEC or also non OPEC country (a storm, dry weather, rain, strike, heat, cold, demonstration and/or any other event) that often has no whatsoever relation to the world oil market and also absolutely nothing with our oil import from Russia, everything is a good reason for the price hike on the markets of the CEEC countries and/or at least some of them including always also the Slovak Republic.

3. IN CONCLUSION

   In the above list of various specifics of the transformation to the modern market economy we could continue with many more examples of the potential and real fraudulent activities but the required limited size of the paper does not allow us to cover all of them. Hence at least briefly we have to mention in this connection at least some of them. For example that the foreign banks in the CEEC are charging for their services here much higher and various other fees and payments than in their domestic and much richer home countries in the EU. That housing and its construction has been much more expensive here than e.g. in the Austrian metropolitan Vienna being three times bigger and with much better infrastructure than in the neighboring Bratislava. There is still a very high taxation of still relatively low incomes where on incomes has been applied a common 20% income tax but on all purchases and services an other 20% VAT, then it is no surprise that the purchasing power in the CEEC has been very low and thus not any driving force for any higher demand, production, etc. The part of the privatization has been carried out through the state monopolies of the old EU member states what is other good example how that wild privatization has been carried out on the pretext that the state is the worst owner of any property?! It means that most probably some states are considered to be more suitable for owning that such privatized property in the CEEC than their own states?! Unfortunately that is really true! In some countries the GDP has been growing in a record high tempos like e.g. in Slovakia but… Where are the results of such a growth, where are newly generated jobs? Where are lower prices thanks to high productivity and more efficient production, distribution, etc.? And so on and so forth we could continue in the new and new examples how the modern market and capitalist economy has been often (mis-)applied in the CEEC.

In the very end is perhaps worth to mention that the former DDR/GDR or the East Germany is the best example that something has been going here really not in the best possible way regarding our transformation to the market economy. The former DDR/GDR has passed in difference to all other CEEC in a completely different way. In difference to them it has needed not 12-14 years for that transformation and transition from one day to the next one the former socialist East Germany has became from one day to the next one an integral part of the Federal republic of Germany and thus also the part of the EU and its citizens became citizens of the EU and the country a member of the OECD, etc., The former People's Army of the DDR/GDR during the one day has become the Bundeswehr (German army) and thus also a part of the NATO and so on and so forth. But when recently there was a survey on the 20th anniversary of the unification of Germany, almost 40% of the citizens of the former DDR/GDR expressed their wish that they would rather live in the former DDR/GDR with all its shortcoming, restrictions, a powerful Stasi (their KGB) than in their new unified homeland?! Those forty per cent could be understood also as practically almost all people who could remember their life in their former first German state of workers and farmers as the former DDR/GDR has been calling itself. That all in spite of all multi billion transfers from the West to the east of germany since its unification. In spite of the fact that the former east german mark has been changed to the West german mark in the artificially much better exchange rate of 1:1. That all Germans immediately without any starvations, belt tightening, accession negotiations, entry criteria have become automatically the citizens of the EU i.e. the number one economy in the EU and one of the strongest in the world, etc.

Also from this German example it is clear that most probably something has really gone wrong with the transformation of the former socialist CEEC to the modern capitalist market economy within the EU and all its supporting funds, assistance and development programs, etc.

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Bonnie L. Stelmach

District Conditions and Practices that Lead to School Council Effectivness

Abstract

Implementation of educational policy and structures such as school councils gesture the importance placed upon collaborating with parents in educational decisions. Aligning the work of school councils with system-wide goals for student achievement, however, involves more than bringing parents to the table. This qualitative research explores the practices, structures, and philosophies of one Canadian school division that has experienced success with transitioning parents' involvement from the social support realm to one in which they contribute to student learning. The questions that undergird this case study are: What conditions/factors contribute to the effective engagement of school councils in educational goals? What role do district administrators play in school council effectiveness? In other words, how can school councils do more than fundraise? This study was situated in Saskatchewan, Canada, the last province to legislate school councils. Through an amendment of its Education Act in 2006 Saskatchewan created School Community Councils (SCC) whose mandate is to involve parents and community members as advisors in school improvement planning. This case study is part of a larger study which investigated the influence of non-educator perspectives on the implementation of school council policy. In my data collection I discovered a school division whose practices were different from the others, and which seemed to contribute to the effectiveness of the school council in terms of its alignment with district-wide improvement goals. I believed the role of district-based leadership in school council effectiveness could be understood by looking at this particular site. Framed within a constructivist orientation (Denzin & Lincoln, 2011) and based upon Stake's (2005) notion of instrumental case study, I aimed to document the activities and practices of a secondary School Community Council in Saskatchewan, Canada. Less research focuses on parent involvement at the high school level, and it is also known that parent involvement declines at this level (Epstein, 2001); therefore, this delimitation created a potential for learning about an understudied context. Individual, semi-structured interviews (Fontana & Frey, 2005) were the chief data source. I interviewed twice four parents who were SCC members. I also interviewed the district community coordinator and a school board member because they participated directly on this school's SCC. I also interviewed the Director because in Saskatchewan, the Director oversees educational planning and policy implementation. All interviews were recorded, transcribed, and returned to participants for member check (Guba & Lincoln, 1985). Data have been reduced during first cycle coding using what Saldaña (2009) calls simultaneous coding (p. 62). This involved descriptive coding (p. 70) to reduce the data into basic topical categories of meaning. Second cycle coding will employ axial coding to identify emergent themes. Themes will yield insight into: (a) the role of district-based leaders in school council effectiveness; and (b) conditions and/or factors that contribute to school council participation in educational improvement. Data analysis will be completed by January 2013.

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Tamás Tirnitz, PhD

Acquiring shareholders through information? – The case of Budapest Stock Exchange

Abstract:

The recent economic crisis made it difficult for companies to meet their financing needs – even in Hungary. Listed companies, however, had the opportunity to bring in equity capital.

Value Reporting helps companies decrease the information asymmetry between them and the shareholders. Value Added Reporting is a part of this voluntary reporting. The former Value Added Reporting practice of listed Hungarian companies were poor, but it was changing during the last years.

As new competitors for equity capital, also some non-domestic companies - i.e. European blue chip firms - are quoted at Budapest Stock Exchange (since 11/2011). In this research, we compare the Value Added Reporting practices of domestic and non-domestic companies and try to find out, whether the reporting differences correlate with acquiring of shareholders.

Keywords: value reporting, voluntary information, value creation, management accounting, stock exchange, Central Europe

JEL classification: M10

Introduction

During the recent financial and economic crisis firms often had to face with the scarcity of debt financing. Banks did not renew old loans, neither approved new transactions and free capital at the market of bonds was limited. Therefore, the need for financing businesses could not be settled in the old way, companies had (and still have) problems with acquiring enough capital. This description has been true for the case of Hungary, too.

Some companies could acquire new equity from their owners. It was supposedly easier to do so for listed companies because they could get fresh money from both the old and the possible new owners. These efforts, however, can only result in success when listed companies do not forget to deal with the information asymmetry at the stock exchange. Information asymmetry stems from the principal-agency relation between shareholders and companies (i.e. the managers).

To decrease the asymmetry, companies should consider giving more information to actual and potential shareholders than required by law or stock exchange regulations. This voluntary information provision is called Value Reporting (or Business Reporting, see Böcking [1998]). It supports shareholders ex-ante (before buying the shares), enabling them to assess the potential of their

investment decisions better as well as ex-post (while holding the shares), leading to better evaluation of the performance of their investments (AICPA [1994], Ruhwedel – Schultze [2004]).

Value Added Reporting

There are several models for Value Reporting in the literature (for an overview see Fischer – Klöpfer [2006]), with varying details. For the research, a specific model of Value Reporting was chosen, being one of the most comprehensive models in this field and often used for empirical research. A detailed description of the model is given by, for example, Ruhwedel – Schultze [2006]. This Value Reporting model brakes down the recommended voluntary information in three categories:

- **Value Added Reporting** describes measures of value creation as well as their application in the management of the company. Such measures include economic value added, cash value added, cash return on investment, discounted cash flows etc. The report should also involve detailed information about elements of these measures: discount rate(s), often weighted average cost of capital, future cash flows, beta-factor, risk premium, or risk-free interest rate. It should also be demonstrated how these measures are used in decision making, rewarding, or in other ways (Fischer – Wenzel – Kühn [2001]).
- **Total Return Reporting** quantifies former and future "gains" of the shareholders. The dividends and the flotation of the share price should be compared to benchmarks. Benchmarks could be the local stock market index (e.g. S&P 500, Nikkei, DAX or in Hungary: BUX), the floating of a competitor, the weighted average of some competitors or the floating of an other useful model-portfolio. Expectations should be based on ratings and other types of analyses. Further indicators of the shareholder return include earnings per share, cash flow per share, price-to-book ratio etc.
- **Strategic Advantage Reporting** focuses on the future, motivating owners to hold the share, or others to buy it. This part of Value Reporting forecasts the future development of the business. The documentation of the strategy, the underlying core competencies, the intangibles, the risk management system, the background of the management team and other factors should demonstrate stable development and help assessing future value creation.

The Value Added Reporting, like the Value Reporting as a whole, is considered as a voluntary disclosure: there are no prescribed elements, schemes or minimum criteria. Its aim is clear (i.e. to reduce the information asymmetry of the shareholders) and each company has to decide through which data it can or wants to fulfil this "homework". So the measures listed above are examples from empirical overview of company practices.

The information elements of Value Added Reporting could be divided up in at least three categories which can be shown as concentrated circles. The most comprehensive information is the value created (measured as economic value added, cash value added etc.). Parts of this measures are for example the costs of capital (cost of equity capital or weighted average cost of capital), the cash flows or the NOPATs (net operating profit after taxes) of future periods. These semi-detailed pieces of information make up the second category. And there are finally the most detailed elements which could not be more broken down. Examples are the beta-factor, the risk-free interest rate or the components of yearly cash flow and yearly NOPAT. These concentrated circles could be visualized as follow:

Figure 1

Elements of Value Added Reporting classified by detailedness (with examples)
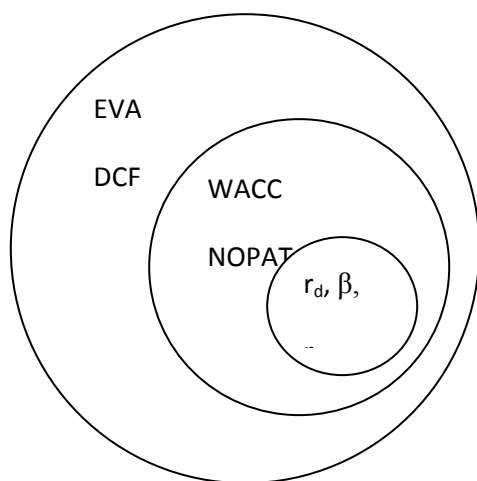
If a company looks at the shareholders as specific customers, it should give them not only single numbers – i.e. value creation in the period – but the detailed background (i.e. input data) of computations and, preferably, verbal explanations as well. An earlier research gave an overview about the inputs and the long-term oriented calculations of value creation: discounted cash flows, cash value added with cash flow return on investment, economic value added, and market value added (Tirnitz [2004]). Another overview of formulas can be found in Quick – Kayadelen – Flashaar-Bloedorn [2008].

Shareholders can use detailed data to elaborate their own (ex post and ex ante) calculations, sensitivity analyses, trend-explorations etc. The more detailed information is given, the profounder could be made the analyses by the shareholders. The most detailed information (e.g. beta-factor, risk-free interest rate) can be best validated and benchmarked – better than more comprehensive data (e.g. weighted average cost of capital, economic value added). This means that more detailed information is more valuable for the shareholder and can therefore better decrease their information asymmetry.

But only a single β (without r_f and r_M) or a single WACC (without future cash flows) is a nearly worthless information for the shareholders. Therefore we should see these concentrated circles as a whole and each minor circle contains complementary information to the next larger circle. The shareholder's information needs can be best satisfied if relevant pieces of information are provided from each circle. An example is shown in Figure 2:

Figure 2

Combination of relevant pieces of information to the shareholders (example)
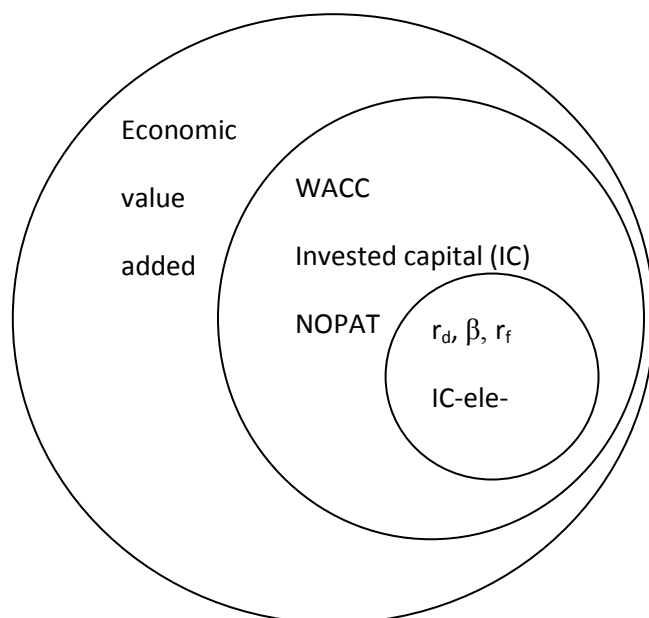
There are different potential channels to deliver this voluntary information to actual and potential owners of the company (Knauer [2011]). The channels and their importance have changed over time. There are two main channels listed in the literature: annual (and semi-annual) reports and the homepage of the company (Fischer – Klöpfer [2006]) while ad-hoc-releases, conference calls, presentations for analysts are less frequently used. My actual research focuses on annual reports.

The Case of the Budapest Stock Exchange

The Budapest Stock Exchange (BUD-SE), located in the Hungarian capital, is the national regulated market for securities (and commodities). It was re-founded 1990. The security section of BUD-SE is divided into two listing categories: the premium category A covers the bigger firms and the standard category B includes the other companies. My research focuses on issuers of equities in the category A (18 companies, March 2012, the begin of the research).

In fall 2011 a new section has been established for equities of non-domestic firms (listed in other stock exchanges). The number of issuers in this section varied and was in March 2012 as high as 20. [1]

Former research findings

Former research (Tirnitz [2010]) showed that companies listed at BUD-SE did not give voluntary information in the sense of Value Reporting. The most "neglected" part of Value Reporting in 2004 and 2005 was the Value Added Reporting: only four companies (9,3%) reported about this

topic (all of them were listed in the premium category A, 19% in this category) while other companies did not published any detail at all. However, these four companies cannot be seen as good examples because they only partly satisfied the information needs of its shareholder-principals. The detailed information disclosure in the annual reports is shown in Table 1.

Table 1

Value Added Reporting of Hungarian listed firms (category A) in 2004-2005 (Tirnitz [2010])

Company	Relevant pieces of voluntary information
DÉMÁSZ (electricity supply)	– decision-making is NOT based on shareholder value – variable payments are NOT coupled to value based measure(s)
FHB (bank)	– two-year option plan for managers
Graphisoft (software engineering)	– value of stock options by managers – input data for option pricing
Magyar Telekom (telecommunication)	– risk free interest rate – weighted average cost of capital for the Group – weighted average cost of debt capital – stock option plan for managers
MOL (oil industry)	– long-term incentive program

The main focus of Value Added Reporting was laid on describing the use of value based measures in the rewarding systems (mostly for managers). The value added or his elements were disclosed only by one company (Magyar Telekom), however even his disclosure was dissatisfactory because investors were not able to compute the value creation. On the other hand, the statements of DÉMÁSZ have been clearly against the interest of shareholders – a "disclosure of negligence".

It was a surprising result because the principal-agent relation had been analyzed for decades, and the need for and the tools of Value Reporting had been known for a long time. Empirical findings about Value Reporting practice at other, mainly German, stock exchanges had been already published: they show that some companies exercise better Value Reporting practices while others do not use fully this opportunity. [2] For the Hungarian capital market, it exists only one former research on Value Reporting: Tirnitz [2010].

Research questions

Value Added Reporting covers the (disclosure of the) value based measure and its use in managing the business. For investors, the information about value creation is more relevant than its use, because, without the figure of value created, the description of its use is lacking in content. Moreover, we have seen in former Hungarian research that the disclosure of value added numbers was a big

exception, even in the premium category A of BUD-SE. For that reason, my research concentrates on voluntary disclosure of value added numbers and their elements.

As mentioned above, the recent crisis possibly made stock exchanges a more interesting financing source of capital. Acquiring capital successfully requires a more intensive use of both, Value Reporting and Value Added Reporting as a part of it. This leads us to the first research question:

- **RQ1:** Did the listed companies at BUD-SE exercise better Value Added Reporting practices after the crisis than before it?

Since November 2011, shares of non-domestic companies have been also traded at the Budapest Stock Exchange (section BETa). This new trading segment consists of 20 shares (March 2012), making the Hungarian equity market maybe more competitive. The new impulse might also have the potential of intensifying Value Reporting especially Value Added Reporting practices of the Hungarian listed companies in the future. Two research questions can be set up regarding this development:

- **RQ2:** What are the characteristics of Value Added Reporting of non-domestic companies at Budapest Stock Exchange?
- **RQ3:** Did the establishing of the new trading segment BETa enhance the Value Added Reporting practice of Hungarian listed companies?

Value Reporting as a whole, and Value Added Reporting as its part should (as mentioned above) reduce the information asymmetry of shareholders. Value Added Reporting can be practiced more or less intensive – see the three concentrated circles above. The companies lower the information asymmetry in order to hold actual and to attract new investors. Therefore we can put the last research question, derived from the title of this paper:

- **RQ4:** Can we find a relationship between the degree of Value Added Reporting and the acquiring of shareholders?

Research design

The first part of the research consists of analyzing annual reports, being the most important communication channel between the companies and the shareholders (and potential new owners as well). It is assumed that companies should use (at least) this channel to report all the information they want to give the shareholders. Content analysis of the reports thus proves to be an adequate tool to answer the research questions RQ1-RQ3.

The 2010 reports of Hungarian companies were used to answer research question 1. The effects of the economic and financial crisis (scarcity of financing funds, nearly total lack of debt financing) have been emerged in Hungary since 2008. We can suppose that two years were time enough to change, if needed, the disclosing attitude towards shareholders and broadening the Value Added Reporting practice.

The non-domestic companies entered the BUD-SE in November 2011. Their 2010 reports have been already published at this time. Therefore, these reports give us the opportunity to analyze the relevant Value Added Reporting practice of the non-domestic companies and answer research question 2. The Hungarian listed firms faced these reports as a new challenge for their disclosure policy. The

reaction to this emerging challenge can be find in their 2011 reports which were used to evaluate research question 3.

Financing rules of banks and insurance companies are subject to certain specific regulations (e.g. Basel III and solvency requirements) and involve unique ways of gaining capital. For this reason they are not involved in the research, leaving 15 Hungarian and 13 foreign companies for analysis. Annual reports were searched for providing voluntary information about measures of value creation (see a list of measures used above), their detailed inputs as well as their use in managing the company. Let us give an example of filtering the voluntary information: In IFRS reports stock option plans have to be reported so the input for Black-Scholes model (e.g. risk-free interest rate) in not a voluntary information. Due to Hungarian Accounting Standards the option plan is not a necessarily part of reporting, the information about the plan and any detailed information is therefore voluntary.

After having found out the reporting characteristics of each listed firm, in the second research step we classified the intensity of their voluntary information (regarding only the Value Added Reporting). xxxxxxxxxxxxxxxxx + forgalmi adatok, és válasz RQ!-re

Findings And Discussion

According to the research design, relevant pieces of voluntary information have been filtered out from the annual reports. In case of Hungarian companies, the tables below show only firms which were listed in March 2012 (DÉMÁSZ was delisted between 2004 and 2010). All banks and insurance companies (domestic and non-domestic) were left out. The findings enable us to answer the research questions Q1-Q3 step-by-step.

Ad research question 1

Table 2 summarizes the Value Added Reporting of Hungarian listed companies after the crisis and highlights the differences between disclosures before and after the crisis. The research focus was laid on measures of value creation and their elements; information about use of these measures was not searching for. The rows contain the 15 relevant Hungarian companies in category A of BUD-SE, their main industry is given in brackets.

Table 2

Comparison of Value Added Reporting of Hungarian listed firms before and after the crisis

	Value Added Reporting...	
Company	**...in annual report 2004**	**...in annual report 2010**
Állami Nyomda (printing)	– not listed	– none
Danubius (hotels)	– none	– WACC in Hungary and in Czech Republic for reported period and the year before (p. 54), however WACC is

		translated as "cost of owner capital"
		– average interest rate for debts (p. 56)
E-Star (renewable energy)	– not listed	– none
EGIS (pharmacy)	– none	– effective discount rate for future cash-flows from securities (p. 138, 229) and from buildings (p. 237)
EST Media (media)	– none	– none
FOTEX (retail)	– none	– none
Graphisoft Park (property management)	– input data for option pricing	– WACC for reported period and the year before (p. 36) – interest rate of issued bonds for reported period and after (p. 30) – weighted average interest rate of loans for reported period and after (p. 37)
Magyar Telekom (telecommunication)	– risk free interest rate – weighted average cost of capital for the Group – weighted average cost of debt capital	– WACC for reported year and the year before by segments and regions (p. 68) – average interest rate for two parts of liabilities (p. 89, p. 90)
MOL (oil industry)	– none	– weighted average interest rate for different categories of liabilities (p. 69) – WACC for reported year and the year before – based on both USD and HUF (p. 55) – WACC for subsidies in different European countries (p. 58, p. 59) – risk-free interest rate for reported year and the year before (p. 83)
Pannergy (green energy)	– none	– none
Rába (vehicle construction)	– none	– risk-free interest rate for reported year and the year before (p. 38, p. 39) – value added in % (of an unknown measure) (p. 6)

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Richter (pharmacy)	– none	– WACC for future cash flows (p. 117)
		– WACC for an asset group (p. 110)
Synergon (system provider)	– none	– WACC for a subsidy (p. 41)
		– risk-free interest rate (p. 36)
TVK (chemistry)	– none	– WACC (p. 30)
		– risk-free interest rate (p. 46)
Zwack (alcoholic drinks)	– none	– discount rate for Black-Sholes (p. 69)

The Value Added Reporting practice of Hungarian listed firms has massively changed during these 6 years. We couldn't find "disclosure of negligence" any more. Only five companies (33%) didn't give relevant pieces of information, two of them went public after 2004.

The most published element of Value Added Reporting was the weighted average cost of capital, WACC (8 companies, 53%) which is used for calculating all the long-term value based measures and economic value added (as a measure of year basis), too. The investors need the WACC for future periods – provided only by two companies (EGIS, Richter). In the other cases, the current WACC can be understood as estimate for futures WACCs – a rough but often used way of dealing with future periods.

We also can find detailed information about cost of capital. Some companies distinguished between WACC for regions, for subsidies, for currencies (HUF and USD), for segments. It's a sign of willingness to provide essential and useful information for investors. The value added themselves – as amount – was not published at all. We therefore couldn't find any EVAs, CVAs (CFROIs) and DCFs. Also the future cash flows, needed to calculate the value creation, were not published in the examined reports.

To sum up these findings, we can derive that **the answer to RQ1 is definitely yes**.

The significant changes in Value Added Reporting root not only in the crisis. But the consequences of the financial troubles can (at least) partly explain the broader voluntary reporting practice. Because there were no relevant changes in Hungarian accounting law, corporate governance recommendations or stock exchange regulations. The agent theory did not provide new insights into the relationship between companies and their owners. So there could have been minor factors influencing the changes in reporting practice of the listed companies – but one major factor has been for sure the crisis and its effects on financing the business.

Ad research question 2

The trading section for non-domestic companies was established in fall 2011. The new competitors to domestic listed companies could have had different disclosure practices. This research question examines the characteristics of Value Added Reporting of non-domestic companies listed at

BUD-SE. The 2010 annual reports were analyzed and give us a new picture of voluntary disclosure. The findings for each non-domestic company are summarized in Table 3.

Table 3

Voluntary Value Added Reporting in non-domestic firms listed in BÉTa section of BUD-SE

ArcelorMittal	– interest rate for some issued debt securities (e.g. bonds, convertible loans) (p. 103) – weighted average pre-tax discount rate (WACC) for segments (p. 96)
BASF	– discount rate (WACC) for future cash flows (p. 200) – value added of reported year (EBIT after cost of capital) (p. 24, 37); for segments too (p. 49, 55, 61, 67, 73, 78) – value added of proved oil and gas reserves (p. 201) – interest rate of financial indebtedness (e.g. bonds) (p. 182) – risk-free interest rate for the reported year and the year before (p. 185)
Bayer	– risk-free interest rate (p. 228) – pretax and after-tax discount rates for future cash flows for segments (p. 171) – WACC (after-tax) for both company and segments (p. 80) – cash value added and CFRoI for the reported year (p. 81)
BMW	– value added (p. 49) – WACC for reported year and the year before (p. 49, 101) – interest rate for debts (bonds and commercial papers) (pp. 116-117)
Daimler	– value added for both company and segments (pp. 78-79) – WACC for reported year and the yaer before (p. 78) – average interest rate for debts (e.g. bonds, loans) (p. 93)
e.on	– value added (p. 29) – risk-free interest rate, market premium, beta and WACC for reported year and the year before (p. 28) – interest rate for liabilities (p. 71)
Fiat	– WACC for two segments (p. 192)

	– discount rates for receivables by currency (p. 206) – risk-free interest rate for reported year and the year before (p. 225)
Infineon	– WACC for reported year (p. 179) – average interest rate for some liabilities (e.g. loans) (p. 205)
Nokia	– WACC for future cash flows by segments (p. 99, 221) – risk-free interest rate for three past periods (p. 248)
Siemens	– WACC for future cash flows (p. 253) – WACC for reported year (p. 124) – average interest rate for liabilities (e.g. loans, leases) (p. 268)
Telefonica	– average interest rate for loans and other payables (p. 62)
ThyssenKrupp	– value added for both company and segments (p. 59) – WACC for both company and segments (p. 59, 158) – risk-free interest rate for reported year (p. 158) – market premium for reported year (p. 158) – interest rates for bonds, commercial papers and loans (p. 176) – average interest rate for liabilities in the reported year (p. 198)
Total	– WACC for future cash flows (p. 194, 195) – WACC of proved oil and gas reserves (p. 271) – risk-free interest rate for three past periods (p. 232)

All non-domestic companies published at least one relevant piece of information. But the firms' voluntary disclosure practices show an uneven picture. The amount of value creation per year was found six times present (each case from Germany but not all German companies were included in this group). This is considered as a piece of "final information" (or "ready-to-eat" for the shareholders). Bayer disclosed two relevant figures to value creation: cash flow return on investment as relative measure and cash value added as amount, both on a year base. The picture can be more differentiated by providing value creation information by segments (BASF, Daimler and ThyssenKrupp).

One company didn't disclose WACC. In case of publishing only the weighted average cost of capital for the reported year, it is the owners who have to complete the calculations (what, in the most cases, proves to be an achievable challenge). The WACC for future cash flows (BASF, Bayer, Nokia, Siemens, Total), i.e. for future periods, could be hereby a big help. We also could find risk-free interest

rates (7 firms), market premiums (e.on, ThyssenKrupp) and only one beta-figure (e.on). These are elements of computing the value creation.

The average interest rate for debts, loans or liabilities is only one part that is required to calculate the WACC, so disclosing only this information would have limited use. The actual WACC could also serve as the basis of estimating future WACCs. This is, however, a very uncertain method and we are often missing the components of WACC which could support the estimation mentioned above.

Value added (as reported by the non-domestic companies) is mostly perceived as a short term indicator because it refers to only one year. The literature, however, offers long-term measures of value creation, too. These measures include discounted cash-flows, cash value added, and market value added (Tirnitz [2010]). For computing these measures, future data (cash-flows or earnings and discount rates) are needed. Bayer published this information: gross cash-flows as input for cash-flow return on investment and further input of cash value added, covering a wide range of information needed by shareholders.

The Value Added Reporting of non-domestic companies is broader and deeper than the practice of the Hungarian listed firms. They disclose value added (46%), not only elements of it. WACC was reported by almost all companies (92%) and sometimes even differentiated by segments (5 companies) or by assets (Total). The deepest insight was found in the annual report of e.on: risk-free interest rate, market premium and beta are parts of WACC, and WACC is an element of computing the value added. Such a three-level disclosure couldn't be founded at Hungarian listed companies.

Ad research question 3

The relatively broad and deep Value Added Reporting practice of newly listed non-domestic companies might have been lead to increased voluntary disclosure of Hungarian listed firms. To evaluate this supposed change, Value Added Reporting in 2010 and 2011 annual reports were compared. The results can be seen in Table 4.

Table 4

Comparison of Value Added Reporting of Hungarian listed firms before and after establishing the new trading segment BÉTa

	Value Added Reporting...	
Company	**...in annual report 2010**	**...in annual report 2011**
Állami Nyomda (printing)	– none	– none
Danubius (hotels)	– WACC in Hungary and in Czech Republic for reported period and the year before (p. 54), however WACC is translated as "cost of owner capital" – average interest rate for debts (p. 56)	– WACC in Hungary and in Czech Republic for reported period and the year before (p. 26), however WACC is translated as "cost of owner capital" – average interest rate for debts (p. 28)

E-Star (renewable energy)	– none	– lack of annual report
EGIS (pharmacy)	– effective discount rate for future cash-flows from securities (p. 138, 229) and from buildings (p. 237)	– effective discount rate for future cash-flows from securities (p. 35, 216) and from buildings (p. 42)
EST Media (media)	– none	– none
FOTEX (retail)	– none	– delisted
Graphisoft Park (property management)	– WACC for reported period and the year before (p. 36) – interest rate of issued bonds for reported period and after (p. 30) – weighted average interest rate of loans for reported period and after (p. 37)	– WACC for reported period and the year before (p. 37) – interest rate of two security classes for reported period and after (p. 32) – weighted average interest rate of loans for reported period and after (p. 40)
Magyar Telekom (telecommunication)	– WACC for reported year and the year before by segments and regions (p. 68) – average interest rate for two parts of liabilities (p. 89, p. 90)	– WACC for reported year and the year before by segments and regions (p. 48) – average interest rate for two parts of liabilities (p. 69, p. 70)
MOL (oil industry)	– weighted average interest rate for different categories of liabilities (p. 69) – WACC for reported year and the year before – based on both USD and HUF (p. 55) – WACC for subsidies in different European countries (p. 58, p. 59) – risk-free interest rate for reported year and the year before (p. 83)	– value added for four recent periods (p. 106) – weighted average interest rate for different categories of liabilities (p. 63) – WACC for reported year and the year before – based on both USD and HUF (p. 50) – WACC for subsidies in different European countries (p. 54, p. 55) – risk-free interest rate for reported year and the year before (p. 80)
Pannergy (green energy)	– none	– none
Rába (vehicle	– risk-free interest rate for reported	– weighted average interest rate of

construction)	year and the year before (p. 38, p. 39) – value added in % (of an unknown measure) (p. 6)	the loans (p. 40)
Richter (pharmacy)	– WACC for future cash flows (p. 117) – WACC for an asset group (p. 110)	– WACC for an asset group (p. 108)
Synergon (system provider)	– WACC for a subsidy (p. 41) – risk-free interest rate (p. 36)	– WACC for a subsidy (p. 43) – risk-free interest rate (p. 37)
TVK (chemistry)	– WACC (p. 30) – risk-free interest rate (p. 46)	– WACC (p. 32) – risk-free interest rate (p. 53)
Zwack (alcoholic drinks)	– discount rate for Black-Sholes (p. 69)	– discount rate for Black-Sholes (p. 69)

The comparison of 2010 and 2011 annual reports shows minimal differences in Value Added Reporting. 12 companies disclosed the same pieces of information in either year. MOL has, as a single exception, increased the level of voluntary disclosure: besides the elements risk-free interest rate and WACC also the figure of value added were published. Therefore MOL provided the three-level disclosure, mentioned above.

Two firms have tightened their Value Added Reporting. Rába did not publish the "final information" value added any more and Richter considered the WACC for future cash flows not important. In both cases, the quality of Value Added Reporting has been decreased.

The changes in case of Rába and Richter couldn't be a (proper, rational) response to establishing the trading segment for non-domestic companies at BUD-SE. The former Value Added Reporting practice of Hungarian companies (see Table 2) was less comprehensive than disclosures of non-domestic firms (see Table 3). Therefore, the unchanged Value Added Reporting of Hungarian listed companies cannot be seen as "answer" to the new segment, to the new competitors. Only the extended disclosure of MOL could stem from this new situation. Therefore it can be summarized, that **the establishing of the new trading segment BÉTa did not enhance the Value Added Reporting practice of Hungarian listed companies**.

Future research should examine why any Hungarian listed companies (30%) didn't provide any relevant information in their annual reports. One reason could be that they don't concern about value creation at all (i.e. they miss this aspect of management) but it is more likely that they only retain this information inside. An interesting question would be to map the broader background of the reason for non-publishing.

The radical changes in Value Added Reporting between 2004 and 2010 could be analyzed deeper through structured interviews. This research method could give us insight into the causes of

unchanging the voluntary disclosure practice facing the new segment's comprehensive information policy.

Acknowledgement

Notes

[1] The number of non-domestic issuers was 23 in January 2013.
[2] See e.g. FISCHER [2002], FISCHER – BECKER – WENZEL [2001], FISCHER – BECKER – WENZEL [2002], FISCHER – RÖDL [2005], FISCHER – VIELMEYER [2004], FISCHER – WENZEL – KÜHN [2001], GLEIßNER – BERGER – RINNE – SCHMIDT [2005], GÜNTHER – BEYER [2001], GÜNTHER – BEYER – MENNINGER [2003], KAJÜTER – ESSER [2007], KRENSEL – SIEMES – AFRA [2002], QUICK – KAYADELEN – FLASHAAR – BLOEDORN [2008], RUHWEDEL – SCHULTZE [2002]

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Alejandro Hernández-Trasobares

Carmen Galve Gorriz

The Impact of Ownership Concentration and Family Control in Specialization and Diversification Strategies

Abstract:
This paper analyzes the impact of ownership concentration and the influence of ultimate owner's nature of business group (family or non-family) in diversification's decision: specialization, related diversification, unrelated diversification and mixed diversification (when a company uses both related and unrelated diversification). Based on a sample of ninety-nine Spanish listed companies during the years 2000-2005, and using the listed company an their subsidiaries (pyramidal group) as unit of analysis, this research finds: firstly, the highest ownership concentration increases the adoption of specialisation strategies and reduce the mixed diversification; Secondly, attending to ultimate owner's nature, family firms adopt more strategies of specialization and related diversification, and less diversification strategies than non-family firms; Finally, results also show behaviour differences in family firms according to ownership concentration's degree: an increasing ownership concentration's degree in family firms rises the probability of diversification.

JEL: M19, M20, G32, G34
Key words: ownership structure, family firm, specialization, diversification, ultimate owner

Ridvan Tuncel

The Effect of Early Foreign Language Learning on Cognitive Development of Children

Abstract:

The assumption that young children are very much ready to acquire any foreign language (FL) easily and better than adolescences and adults has always been an enticing concern. Because of the plasticity of the children's brain before reaching puberty, in educational quarters, questions like "What is the best time to begin learning a FL?" and "What are the benefits of early FL exposure?" have often been asked by not only teachers and educators but parents as well. The term "putative critical period" pointing the true beginning to learning an FL has getting gravity in accepting a consensus and many research is yielding results supporting this view. In 2002, the Education and Culture Commission of European Community declared that the citizens of the EU members should at least communicate in two languages if they want to be in a more competitive milieu to benefit from the boons of the Community. Being aware of the fact that early FL exposure contributes much to the development of cognition of youngsters, today, in almost all EU countries, FL teaching in the early years of primary education has been one of the most importantly held issues. Turkish Ministry of Education initiated the early FL teaching two years earlier than the former curriculum. In other words, primary learners were taught English in the sixth grade until 1998, but from that time on they are having FL in their fourth grade. This study aims at investigating whether there is a difference between the cognitive developments of learners who begin learning L2 two years earlier than those who begin two years later in the primary education. The findings of the study revealed that the earlier the exposure to FL learning is, the higher the cognitive development of learners is.

Key Words: Foreign Language Learning, Puberty, Cognitive Development, Children

1. INTRODUCTION

In recent years, there have been many discussions in educational quarters that learning a foreign language in early ages has many benefits for children. The frame of the arguments is not only on the certain beginning age for beginning to learn a foreign language (FL) but mostly on the importance of the consideration of the readiness of pupils' cognitive development through a foreign language. Bialystok and Miller states that children are biologically prepared to learn languages while adults are not, thus, such a fact leads us consider there is a critical period for second-language acquisition. In most of the developed countries, the beginning age for foreign language learning is the in the first years of their primary education. In other words, pupils begin learning FL before they reach puberty. Thus, puberty plays an important role on deciding when to begin FL learning and seems to be quite critical for cognitive development. The term "putative critical period" pointing the true beginning to learning

an FL has getting gravity in accepting a consensus and many research is yielding results supporting this view. European Union Council gathered in Barcelona in 2002 made a decision on teaching two foreign languages in the early primary education. In other words, the decision emphasizes the importance of early FL exposure, especially before pupils reach their puberty, namely, third or fourth grade students are considered appropriate for learning FL. Holman (1994) stresses the advantages of learning a foreign language as early as possible and by strengthening her claim through some neurobiological research, she strongly suggests that the best to learn a second or third language is before age 10. While several researches on this matter have revealed that early FL learning provide and promote native-like pronunciation attainment, others have evidenced under the motto of "the earlier the better" that early beginning of FL learning mainly gives way to good language learning. However, few studies have been conducted on the crucial role of the cognitive benefits of early FL experience of children.

1.1. Language Learning and Puberty

Dumas (1999), who studied the cognitive development of 13.000 third and fifth year pupils, argues that by learning an FL children taste a substantial experience thus gain a lot contribution to their cognitive development. Studies concerning the effects of early language learning, namely, FL learning before puberty has been very limited, in Turkey, (Demirezen 2003; Dönmez et. al. 1997; Uslu 2007; Anşin 2006; Akdoğan 2004). The findings of these studies, on the other hand, are all related to the fact that children who experienced an FL before puberty both learn it easily and effectively. However, the effect of the early FL exposure on the cognitive development of pupils has not been mentioned. Some other studies has focused their scope either how to teach FL to pupils FL or on the views of language teachers and parents (Mirici 2002; İlter et.al. 2007).

Penfield and Roberts (1959) used the term "Critical Period" for children learning an FL, though the same term has long been used for small children acquiring their mother tongue. According to Penfield and Roberts, when compared to adults, the cognitive structure of children is so flexible that they learn FL better and more than one FL before the age of nine. Supporting Penfield and Roberts, Lenneberg (1967) states that, two years before puberty, the readiness and elasticity of the children's brain enables them to acquire the grammar, phones and vocabulary of an FL. In the same vein, Lamendella (1977) stressing that children can only learn an FL at the period mentioned by Lenneberg, but uses the term "Sensitive Period" instead of Penfield and Roberts' "Critical Period".

1.1.2. Cognition and Critical Period Hypothesis

According to Borstein (1989), Lamendella's sensitive period can last until the reaching of puberty. In the related literature, there are various studies on the significance of early FL learning and its positive results on the cognitive development of children Lambert 1972; Demirezen 2003; Kırkıcı 2004; Anşin 2006; İlter and Er 2007; Saunders 1998; Halliwel (1993); Armstrong and Rogers 1997; Garnfinkel and Tabor, 1991; Uslu, 2007; Barik and Swain, 1976; Kara, 1999; Akdoğan, 2004; Birdsong and Malis, 2001; Stewart, 2005; Cooper, 1987; Donoghue, 1968; Robinson, 1992; Curtain, 1990; Foster and Reeves 1989).

2. PURPOSE

This study aims at finding whether there is a relationship between early FL learning and the improvement in the cognition of learners. The question to be answered is "Is there a correlation between the cognitive developments of learners who begin learning an FL in the fourth grade and those who begin in their sixth grade?"

3. METHOD

3.1. Subjects of the Study

The subjects of this study were 180 volunteer ELT learners studying in the Education Faculty of Anadolu University in 2007-2008 Spring term. The first group of 90 students, who were attending as freshmen, began learning English in their fourth grade of primary education at the age of nine while the second group of 90 students, who were attending as seniors, began learning English in their fourth grade of primary education at the age of eleven. Students ages ranges from 18 to 26, and the average age was 22.

3.2. Instrument for Data Collection

To collect data, an IQ Test was used to reveal the cognitive levels of two different groups of students. The test is comprised of 20 items the first nine of which questions the arithmetical-logical series and rest of the 11 items test the visual-logical state of learners. The test experts state that, though figures are not necessarily used in daily life and every kind of cognitive activity necessitates arithmetic process, the arithmetical-logical test items are the best indicators of individuals' intelligence level. According to IQ testing experts, visual-logical test items are more specific than the first group in that they specifically measure learners' memory, attention, processing speed and cognitive inspection or investigation. Skean (1989) asserts that, since there is a strong relationship between the language development and the IQ results of learners, IQ tests can be used in a research studying language learning and cognitive development.

3.3. Data Collecting

The testing instrument of this study was employed at the end of the academic year of 2007-2008 spring term. The total amount of the application of the test for 180 students took about 25 minutes. 90 of the learners took their first English courses at the sixth year during their primary education and the other 90 took it at their fourth grade.

3.4. Analysis of the Data

The analysis of the collected data of this study was calculated by using the SPSS statistical analysis program. The data were analyzed through Independent Samples t-Test method at the 0.01 significance level.

4. RESULTS AND DISCUSSION

According to the Independent Samples t-Test results, the mean score of the students (x:15.97; SD:1.43) who began learning English as an FL two years earlier is higher than the mean score of (x:12.57; SD:1.53) those who began an FL learning later (t $_{(178)}$ = -15.389; p<.001; η^2=0.571). In other words, the statistical figures reveal the fact that even two years of early foreign language learning brought about a difference between the two groups of language learners in terms of their cognitive development. Krashen asserts that language development in children's brain starts at the age of two and continues till puberty. If this is true and a child begins learning a foreign language during this period, then, learns any foreign language as good as his/her mother language. According to Gardner et.al., (1972) when a child begins the acquisition the mother tongue during the critical period till puberty and if he/she begins learning a foreign language education before reaching the puberty, he or she will be more successful in his/her further education life compared to her/his peers. Also, Lambert stresses that the aptitude acquired towards a foreign language during early childhood contributes a lot to the cognitive development of children. As Marcias (2001) states, learning a foreign or a second language at an early age not only affects children socially or psychologically but their other mental capacities are affected as well. Similarly, Rosenbusch (1995) claims that early study of a second language produces cognitive and academic achievement. Meanwhile, Ansin (2006) proposes some additional benefits of early foreign learning and states that early exposure helps to develop child's flexibility of the intelligence and increases the comprehension ability in the mother tongue. Although, in Turkey, early FL learning has been experienced for more than ten years, namely, the Ministry of Education initiated early FL education in the 4th grade of state schools in 1997-1998 academic year, there have been many shortcomings of this attempt. Aslan (2008) reviewed the state of early FL learning in Turkey and presented some reasons on the drawbacks of the education and at the same time proposed some suggestions towards the improvement of the current troubles. According to Aslan, weaknesses in early FL teaching can be summarized in three points; there is no coordination between primary and high schools in terms of the sustainability of the teaching, inefficiency of language teachers and the deprivation of the analysis of school type, age differences, developmental characteristics of pupils, the objectives, contents and methods and appropriate course materials and equipment. European Community member countries are also suffer from undesired outcomes of foreign language learning and teaching. Nevertheless, EU Commission, in 2008 report, vehemently supports the early foreign language(s) teaching and imposes the importance and urgency of this issue to all her 27 members.

5. CONCLUSION

The debate on the benefits of early foreign language, educating children as cognitively effective individuals who are able to solve complex problems at school and throughout their life will always be on the focus of both educators and brain related other fields such as neurolinguists and neurobiologists. As this study, though limited in terms of the coverage of the question posed, reveals "earlier is better" for learning a foreign language for children yield a lot of gains in their academic life. Subjects of this study, for example, show us that even two years of early foreign language education creates a difference in their performance in coping with problems presented them through IQ tests. In other words, learners who had their first language education before age 10, namely, at age of 9 just before the beginning of puberty, made them better than those who had foreign language education two years later. Because of huge amount of research findings on the fruitful results of early foreign language instruction, it has widely been believed that foreign language learning not only creates cognitively

sufficient individuals but produces conscious ones that are able to show tolerance other cultures and ready to deal with intercultural and difficult issues. In recent years, and in almost all European Community member countries, primary pupils ranging from 3-6 to 9-10 learn at least one foreign language. In Chinese Primary Schools students start to learn English as a compulsory subject in the third grade. As for Turkey, in state schools, pupils attending primary education begin learning a foreign language at the age of 9 or 10 depending on the year they enroll primary school. On the other hand, in most of the private schools, pupils get their FL instructions in the first grade, even in the pre-school years.

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Wium de Villiers

Fingerprint Comparison Evidence Has Been Under Sustained Attack in the United States of America for the Last Number of Years: Is the Critique With Regard to Reliability Sufficiently Penetrating to Warrant Exclusion of This Valuable Evidence?

Abstract:
The decision in Daubert v Merrell Dow Pharmaceuticals 509 US 579 (1993) established new requirements for the admissibility of expert scientific evidence in the United States of America. Previously, expert evidence was allowed if it was generally accepted in the relevant scientific community. Since the decision, judges also had to weigh other factors in a non-exhaustive list when assessing the reliability of expert scientific evidence. This led to renewed attention to, and scrutiny of, fingerprint comparison evidence in the United States of America. This paper describes these events and investigates the challenges with regard to reliability that were made to fingerprint comparison evidence in the American courts in the wake of these events. The paper also discusses the fundamental test for the admission of expert evidence in jurisdictions with a strict system of evidence and considers whether the critique pointed out by the defendants in the cases are sufficiently penetrating to warrant the exclusion of fingerprint comparison evidence. In evaluating the critique, the paper inter alia considers the practices and events with regard to fingerprint comparison in selected other jurisdictions.

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