

Business Administration and Business Economics

**Identifying Some Roots of Frontline Employee
Attitude in Market Orientation**

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Abstract: Though, various organizational outcomes are purported to result from market orientation in developed countries, very little or no such research has been focused on understanding the complex relationship between market orientation and frontline employee attitude towards customers in a developing country like India. In order to plug the gap the present study has been conducted in Indian service sector with samples from its two prestigious banks. The study that matches perceptions from both the frontline employees and their customers reveals that the elements of market orientation like market intelligence generation, market intelligence dissemination, and market intelligence responsiveness exert its impact on frontline employee attitude or what is generally known as functional qualifications in service marketing literature and consequently effects customers' evaluation. Conclusions and discussion of the study are drawn, and finally the implications of the study for practitioners have also been discussed.

Keywords: market orientation; frontline employee; employee satisfaction; employee attitude

JEL Classification: E24

1. Introduction

Frontline employees are those who deal directly with customers and link an organization with the environment within which it operates (Chung and Schneider, 2002). In service organizations, frontline employees refer to service workers who interact with their customers (service users) in service encounters. In fact, they are the participants in service encounters who have mandate not only to represent an organization in such encounters but also to keep the organization's delivery system going. (Sahaf, 2002). The literature suggests that these frontline employees work together with customers in creation of services and putting customers in what has been referred in service literature as a co-producer role (Lovelock, 1984). Although, the significance of the frontline employee is uncontested by business professionals and researchers, yet they are understudied (Singh, 2000). There is

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general agreement that service encounters traditionally described as the interaction that occurs between frontline employees and customers (Bitner et al, 1990), play a vital role in external customer satisfaction and thus to the firms overall success (e.g., Bateson, 1995). The frontline employees are more important in service organization as any strategic or operational change is made 'visible' to customers through the mediation of the frontline employees. Most of the 'moments of truth', customers experience with the service organization takes place with frontline employees, and therefore, such employees are a core part of the service. Gummesson (1987) referred these employees as 'part-time marketers', who are involved to some extent in marketing activities, irrespective of the fact whether or not their role formally includes marketing.

If a frontline employee reacts unpleasantly, it becomes part of quality and customer will judge it as poor. Consequently, the interaction which is supposed to create core value in service delivery will become a means of losing reputation through negative word of mouth communication. Therefore, frontline employee behavior needs to be managed which is both crucial and challenging. Organization has to provide a setting which supports and enables frontline employee behave in a way desired by customer and improve the overall service delivery. There are number of ways to ensure that the frontline employees behave in a way desired by customers, possesses a sunny disposition, willingness and above all ability to serve their customers better. Among the ways, the focus of the present study is the philosophy of market orientation. The concept, though fairly new to the services marketing literature, yet has been widely acknowledged by service marketing scholars, and business professionals in developed countries.

Market orientation is the organization-wide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments, and organization wide responsiveness to the market information so generated through market intelligence generation. It is a company philosophy being focused on discovering and meeting the current and future customer needs by effective organizational response.

In the relevant literature of market orientation to date, MARKOR (Kohli et al., 1993) is one of the most popular and widely used available scales of measuring market orientation. MARKOR is based on Kohli, Jaworski, and Kumar's (1993) definition of market orientation as the composed of three set of activities:

Intelligence Generation: It refers to the collection and assessment of both customer needs/preferences and the forces (i.e., task and macro environments) that influence the development and refinement of those needs. Importantly, multiple departments should engage in this activity because each has a unique market lens.

Intelligence Dissemination: It refers to the process and extent of market information exchange within a given organization. Because the focal point of

dissemination is the entire organization, attention should be balanced between both the horizontal (interdepartmental) and vertical transmission of market place information. Furthermore, the dissemination of intelligence occurs both formally and informally.

Intelligence Responsiveness: It refers to the action taken in response to intelligence that is generated and disseminated. On the planning side, the concern focus on the degree to which market place needs play a prominent role in the assessment of market segments and development of marketing program. Actions based on market intelligence capture the speed and co-ordination with which the marketing programs are implemented.

The present study considering the objectives of the study has found the MARKOR as the most appropriate measuring scale.

2. Linkage of Market Orientation and Frontline Employee Satisfaction

Several research studies have reported that firms who keep market orientation philosophy abreast as their organizational strategy are more likely to provide social and psychological benefits to their employees (Kohli and Jaworski, 1990). These psychological benefits are found vivid in the organizations in the shape of employee job satisfaction and other desired employee attitudinal responses. This seems to be logical as market oriented firms are able to know exact requirements of their customers through market intelligence generation and are able to provide the same through market intelligence responsiveness, it enhances customer value and firm's performance (Narver and Slater, 1990). Consequently, employees share a feeling of worthwhile contribution and gain a sense of pride for having achieved desired customer satisfaction (Kohli and Jaworski, 1990). Additionally, being interdepartmental integration and coordination as one of the core elements of market orientation philosophy, the market oriented firms generally promote a culture of cooperation among departments and individuals to achieve the commonly held goals. This in turn results into shared feelings of employee contributions to the firm. Consequently, employees gain a sense of pride from belonging to the firm, thus drive more job satisfaction (Kohli and Jaworski, 1990).

In view of the above discussions the authors propose following hypothesis:

H1 Employee perceived market orientation is positively related to employee job satisfaction.

3. Linkage of Market Orientation and Frontline Employee Attitude via Their Job Satisfaction

The discussion and relevant literature that clarifies the basis of above hypothesis assume market orientation as a predictor of employee job satisfaction. Therefore it is reasonable to assume that market orientation may also shape the positive attitude of frontline employee towards their customer. This is in view of the fact that satisfied employees are motivated and have motivational resources to deliver adequate effort and care to their customers. They can provide customers with interpersonal sensitivity and social account (i.e., adequate explanations for undesirable outcomes). They have enough emotional resources to show empathy, understanding, respect and concern, thus positively affect their behavior. Further, numerous empirical studies show a strong relationship between employee job satisfaction and customer service quality perception. Though both the technical as well as behavioral dimensions are vital for customer service quality perception, yet the later one (employee attitude, courtesy, helpfulness, enthusiasm, respect etc.,) are more important. The significance of employee attitude in customer evaluation lies in the fact that of the five, as many as three dimensions pertain to behavioral side in the SERVQUAL (Parasuraman *et al.*, 1988), a service quality measuring scale which is commonly used to measure customer service quality perception.

Thus, considering above discussion, the author also propose the following assumption

H2 Employee job satisfaction is positively related to employee attitude towards customer.

4. Methodology

Investigations were carried out to ascertain the relationships between three main dimensions, i.e., market orientation, frontline employee job satisfaction and frontline employee attitude towards customers. While market orientation and employee job satisfaction is as perceived by frontline employee, the frontline employee attitude is as perceived by customers. Further, employee job satisfaction is as a result of market orientation and employee attitude in turn is as a result of employee job satisfaction.

Data Collection and the Sample: The questionnaires were hand distributed among frontline employee and their customers from two banks operating in northern part of India. Using Lickert's 5- point scale throughout the study, responses to items were scored in such a way that a response indicative of most favorable was given the highest score and vice-versa (strongly disagree = 1, strongly agree = 5). As many as 119 survey instruments of frontline employee and 357 survey instruments

of customers were finally found usable for analysis. A common identification number was allotted to frontline employee's and customer's questionnaire to facilitate the matching process of the employees' and customers' perceptions about employee job satisfaction and their attitude respectively. Besides mean, standard deviation and reliability alpha, regression analysis was also used to estimate interdependence of various dimensions considered in the present study.

The instruments used in the present study were mostly drawn from previous studies in marketing and behavioral science. The investigation about the level of market orientation of the system under study involved modification of MARKOR, originally developed by Kohli, Jaworski and Kumar (1993). Three items- scale originally developed by Hackam and Oldham (1975) was used to measure the front line employee job satisfaction. Finally, to measure frontline employee's attitude and behavior towards customer during the encounter; six items measuring only employee behavioral attributes were drawn from various dimensions of the SERVQUAL scale (Parasuraman *et al.*, 1988). This is because the main purpose here was not to assess the service quality at a broader service provision level rather the attitude at the employee- customer encounter level.

5. Analysis and Results

After taking respondents data of all the banks together, the first activity was to assess its reliability. For this purpose Cronbach Alpha values were calculated. The reliability coefficients of the components of market orientation were 0.67, 0.54, and 0.63 for intelligence generation, intelligence dissemination and that of responsiveness respectively. The overall reliability of the customers' questionnaire measuring frontline attitude was 0.71; well above the prescribed cutoff point (Nunnally, 1978). The reliability alpha of the construct measuring employee job satisfaction was 0.68 respectively. For investigating various dimensions under study, the scores of the constituent components were computed as simple arithmetic means of the corresponding item scores.

The influence of various components of market orientation on employee job satisfaction in banking set up is proved via standardized regression coefficients with the help of the regression equations: $y_1 = b_1x_1 + b_2x_2 + b_3x_3 + e$. Whereby, y_1 = Job Satisfaction; X_1 = market intelligence generation, X_2 = market intelligence dissemination; and X_3 = market intelligence responsiveness ; and e = error term.

Table 1. Regression Coefficients from Multiple Linear Regressions between Elements of Market Orientation and Employee Job Satisfaction

Independent Variables	Dependent Variable
	Employee Job Satisfaction
Market Intelligence Generation	0.34**
Market Intelligence Dissemination	0.37***
Market Intelligence Responsiveness	0.42*
<i>R</i> ²	0.39

Note * <.001 ; **< .01; *** <.05;

The SPSS 13.0 for windows was made to run, whereby using ‘*forward regression*’, data pertaining to y_1 was entered as dependent variables and that of pertaining to X_1 to X_3 was entered as independent variables. The results obtained are presented in Table 1.

The results in Table 1 indicate that each of the market orientation components (market intelligence generation, market intelligence dissemination, and market intelligence responsiveness) is significantly correlated with the frontline employee job satisfaction. The results clearly indicate that the more market oriented firms are, the more likely frontline employees’ job satisfaction will be influenced positively *R*² suggest that 39 percent variation in frontline employee job satisfaction is explained by the three elements of market orientation practices. Specifically, greater the emphasis on intelligence generation practices to know about the customers, competitors and market trends, greater the job satisfaction ($b = 0.34$, $p < .01$). Similarly intelligence dissemination and responsiveness also exert positive effects on job satisfaction ($b = 0.37$, $p < 0.05$) and ($b = 42$, $p < .001$) respectively. Therefore, in view of results of the Table 1, it is quite safe to accept the *H1* that employee perceived market orientation is positively related to employee job satisfaction.

On assessing the linkage in-between the frontline employee job satisfaction and customer evaluation based frontline employee attitude, again the regression coefficients were calculated with the help of regression equation- $y_1 = b_1x_1 + b_2x_2 + b_3x_3 + e$; whereby, data pertaining to y_1 (employee attitude) was entered as dependent variable and that of X_1 to X_3 (job satisfaction items) was entered one by one as independent variable. The results obtained thereof are presented in Table 2.

Table 2. Regression Coefficients from Multiple Linear Regressions between Job Satisfaction Statements and Overall Employee Attitude

(Independent Variables)	Statements of Job Satisfaction	(Dependent variable)
		Overall Attitude
	Generally speaking, I'm very satisfied with this job	0.43*
	I frequently think of quitting this job	- 0.21**
	I'm generally satisfied with the kind of work I do	0.37*
	R^2	0.38

Note * <.0001 ; **< .001

The results obtained are presented in Table 2, revealing the fact that almost all the items of job satisfaction are positively and significantly related (see coefficients and p values, in Table 2) to statements capturing the notion of frontline employee attitude towards customers. Among the items of job satisfaction, the statement, "Generally speaking, I'm very satisfied with this job" is obviously the most influential ($b = 0.43, p <.0001$) antecedent to overall frontline attitude. The impact of job satisfaction on frontline employee attitude was confirmed by another pattern of analysis. As the respondents were asked to respond to the items in terms of several degrees of agreements/ disagreements, a significant relationship was found between the responses of six (06) items measuring frontline employee attitude and those of three (03) items, measuring employee job satisfaction. For instance, of the employees who believed that they are generally satisfied with the kind of work they do, 74 percent of the customers agree that such an employee provides prompt service to them; 67 percent of customers agreed that the employee was never too busy to respond to their request; 58 percent agreed that the employee instills confidence in them, and 64 percent report such an employee as courteous and knowledgeable. The relationship of other statements were also found more or less

the same, thus provides sufficient support to the hypothesis that employee job satisfaction is positively related to employee attitude towards customers.

6. Conclusion, Discussion and Managerial Implications

The present study focused on empirical examination of the hypotheses about market orientation, its positive effects on frontline employee job satisfaction and customer evaluation of frontline employee attitude in Indian service context. The findings that highlight the relationship between job satisfaction and the customers' evaluation of frontline employee attitude fall in line with those of Heskett *et al.*, (1997). The relationship between job satisfaction and frontline employees' performance has also been supported by several research studies in past (e.g., Babin and Boles, 1996). In view of the findings that market orientation positively affects employee job satisfaction and consequently their desired attitude; organizations need to continuously monitor the three dimensions of market orientation, considered in the present study to facilitate their service oriented environment. The objectives, plans, service excellence goals should be based on proper research of service recipients' needs, whereby these needs can be converted to specific service quality standards. The banking organizations are generally complex system comprising of multiple departments with multiple cross-functional activities. The managers would be advised to pay more attention that all the concerned agencies make concerted efforts while managing activities of the system. Inter-departmental workshops, conferences, meetings and free flow of information etc., should be encouraged to facilitate the coordination in between departments, sections or divisions. As far as connectivity is concerned, Jaworski and Kohli (1993) even recommended physical closeness of departments in addition to technological hookups etc. Reward system is to be aligned with the performance of the employees in general and new initiatives taken by the employees in particular e.g., awards that encourage innovative and pedagogic market or customer research, should be established. Rewards for frontline employees who are innovative and respond effectively to changing customer requirements are pre requisites, if excellence and market orientation of the system is to be maintained. The extra efforts of the staff should be linked with both monetary and non-monetary rewards in addition to their normal annual pay increments.

In the banks, frontline employee, branch heads, should sit with customers at least once a year to find out what kind of facilities ,services, financial products, schemes are suitable for their requirements and convey the same to headquarter office for consideration. More representation to be given to frontline employee as it is finally a front line employee who has to implement the decisions taken by the top management particularly with regards to service delivery. Service managers need to sensitize the workforce and regularly communicate to them that the survival,

effectiveness of the system largely depends on its adapting to customers changing requirements. The management has to be conscious about market segments at the time of transfers, deployments, allocation of funds, formation of rules and regulations, policies etc. Further, the frequency, quality and accuracy in downward communication can help frontline employees clearly understand the service standards and the roles expected of them. There is also scope for suggesting that behavioral dimensions need to be given due importance in frontline employee performance appraisals and linking them with rewards, incentives, promotions can go a long way to improve frontline employee attitude and consequently the customer treatment.

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Beyond the Obvious: Standardization and Interoperability Issues in Mobile Banking in India

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Abstract: Objectives: Study aims to explore interoperability and standardization issue in mobile banking and to identify gaps in regulatory framework. Prior Work: Many studies exist which reflects that there are problems in adopting mobile banking in India. There are couple of conceptual research which focus on issues in adopting mobile banking, from those research work a conceptual framework was developed which helps in identifying the standardization and interoperability issues. Approach Survey method was adopted where data was collected using multiple entry non-discriminatory snow ball sampling. Data was checked for statistical assumptions followed by one sample t test, Friedman Test, Kendall's W Test and Wilcoxon signed rank test. Results: Both interoperability and standardization issues were critical. It was found that interoperability was more critical than standardization. Implications: There is need of mutual understanding among banks and telecom operators; and up to some extent among mobile handset manufacturers also. Further regulators should issue regulatory guidelines to standardized short code for a particular type of transaction. Value Paper dealt with interoperability and standardization issues, not studied empirically before from regulators' and practitioners' perspective in India.

Keywords: E-Banking; Mobile Payment; Banking

JEL Classification: M19

1. Introduction

In recent time, banking sector has witnessed the intensive application of technology (Weiser, 1991). Such technology is offering convenience to customers in managing money without handling cash (Karjaluoto, 2002) and for banks it is helping in making financial services available to masses and reducing operating cost (Ashta, 2010). One of such technology innovation in banking sector that will help to reach masses and at the same reduce operating cost is mobile banking (Bhavnani et al., 2008; Datta et al. 2001). India is among the fastest growing regions in terms of mobile phone subscribers (ITU Report, 2010). The mobile phones are already

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transforming lives of people here for the better by enabling people to ‘leapfrog’ (Alexander, 2009). In the developing world, there are probably more people with mobile phones than with bank accounts (Porteous, 2006). Further, more than half of the Asia's mobile banking customers in 2009 were in India (Lawson, 2010). Mobile banking has a strong potential in India and realizing the same Reserve Bank of India has already permitted 60 banks to provide mobile banking services to help banks in reducing operational cost and at the same time achieve financial inclusion.

But before this, there are some critical issues & challenges which must be addressed by mobile Bankers and must be properly regulated so that mobile banking could diffuse easily in India. Two such prominent issues in India, yet remaining unexplored are: standardization and interoperability. Standardization could be defined as “a framework of agreements to which all relevant parties in an industry or organization must adhere to ensure that all processes associated with the creation of a good or performance of a service are performed within set guidelines to ensure consistent quality” (Investopedia, 2010). For mobile banking transactions, SMS mediated informational and financial transaction is widely used mode especially in developing countries. So in the study, standardization issue was conceptualized in terms of SMS based mobile banking. Banks design and develop their own systems of various short codes related to particular type of mobile banking transaction to be performed. This leads to standardization issue in the mobile banking (Sharma & Singh, 2009) due to which memorizing and handling different short codes imposes challenge to the mobile banking users. Situation further becomes more complex if a user wants to avail mobile banking services from multiple banks having different types of accounts, due to difficulty in dealing with different SMS short codes of different banks for different transactions (Luarn & Lin, 2005; Wang et al., 2003).

Interoperability is defined as “the ability of diverse systems and organizations to work together”, but this definition goes much beyond in the context of mobile banking (Odinga & Nalika, 2011). In mobile banking, there is a lack of common technology standards, many protocols are being used for mobile banking – HTML, WAP, SOAP, XML to name a few. There are large numbers of different mobile handset and it is a big challenge for banks to offer mobile banking solution on any type of mobile handset. Some of these mobile handset support J2ME and others support WAP browser or only SMS. This situation leads to serious interoperability issue in mobile banking creating hindrance in improving financial inclusion and reducing cost (Banzal, 2010; Agarwal, 2007; Amarnani, 2009). Hence, this study focuses on the standardization and interoperability issues (beyond the obvious issues like security, privacy, customer illiteracy) of mobile banking in India, keeping in view the regulatory guidelines related to the same for smooth diffusion of mobile banking in India. Further this study aims to provide necessary

suggestions on the same to Reserve Bank of India (The Central Bank of India, responsible for regulating mobile banking in India) & service providers. The study should be of interest to the banks and telecom operators providing mobile banking services and the financial regulators, who are increasingly interested in the interoperability and standardization issues of mobile banking.

2. Literature Review

2.1. Standardization Issue

Davis (1989); Karjaluoto et al. (2002); Ramayah et al. (2003); Kleijnen et al. (2004) investigated and agreed that 'perceived ease of use' is valid constructs in understanding an individual's intention to adopt any system and in our study it is mobile banking. As per Davis (1989), perceived ease of use could be defined as the degree to which a person believes that using and dealing with a particular system would be free from effort. In context of the mobile banking it refers to degree to which consumers perceive dealing with mobile banking is hazard free. Cheong and Park (2005); Luarn and Lin (2005) indicated that perceived ease of use has a significant impact on the development of initial willingness to use mobile banking. They also found that there exists a positive causality between perceived ease of use and electronic transaction intentions. Therefore, it is highly predictable that the consumers would use mobile banking only if they find it easy to handle. Guriting and Ndubisi (2006) studied that perceived ease of use had a significant positive effect on behavioral intention to use electronic banking in Malaysia. Similarly, Kleijnen et al. (2004) in their study on wireless finance in Netherlands concluded that perceived ease of use was a significant measure in the development of people's intention to use electronic banking. Guriting and Ndubisi (2006); Luarn and Lin (2005); Wang et al. (2003) studied standardization issue in relation with the different mobile banking short codes provided by different banks. According to them memorizing different short codes imposes challenge to users, further if users were availing mobile banking services from multiple banks and having different types of accounts in that then it becomes extremely difficult to deal with different SMS short codes of different banks. Bamoriya and Singh (2011) in their empirical study on Indian mobile banking sector reported that majority of the mobile banking users feel that mobile banking service standards are lacking among Indian banks which further makes it difficult to do mobile banking from multiple service providers. Standardization is a major issue as lack of standardization of mobile banking services in the country is resulting in increased complexity while using mobile banking services which in turn hamper its growth. They suggested that for resolving this issue banks should develop mobile banking standards in guidance of Reserve Bank of India. Sharma and Singh (2009) stated in their empirical study that users perceive mobile banking as an easier way to do banking in terms of time

saving and anywhere banking. But they find it difficult to remember the different SMS codes for different types of transaction like money transfer, balance check, cheque book request etc. They suggested that banks providing mobile banking services, with their mutual agreements should design and develop uniform global coding to address standardization issue which will ultimately provide ease to the users and helps in the growth of mobile banking in India.

2.2. Interoperability Issue

As per Mas (2011) mobile banking interoperability is a far-reaching vision that promises to improve financial inclusion by leaps and bounds. Further Agarwal (2007) stated that it would be a wise idea for the vendor to develop a mobile banking application that can connect multiple banks' account. It would require either the application to support multiple protocols or use of a common and widely acceptable set of protocols for data exchange. But currently situation is not that rosy and many a times serious interoperability issue in mobile banking is reported. Anderson (2009) stated that emerging mobile banking in developing markets enable two sided markets, bringing together mobile handset users with other mobile users and commercial partners. He argued that the emergence of mobile banking platforms has the potential for spill-over effects, and that these spill-over effects will require regulatory authorities to develop appropriate policy responses. He intended to study the interoperability issue in the mobile banking and his research was derived from the mobile banking strategies of mobile network operators (MNOs) in developing markets, and the regulatory responses to these strategies. His findings suggested that the interoperability of mobile banking platforms between operators based on industry standards will significantly reduce the risk of monopoly dominance by the first-mover, will minimize spill-over impact on the competitive dynamics and will lead to better mobile banking services. Banzal (2010); Agarwal (2007); Amarnani (2009) stated that in mobile banking there is a lack of common technology standards and protocols. Already there are a large number of different mobile handsets and it is a big challenge for banks to offer mobile banking solution on such different type of mobile handsets. Mas (2008) stated that interoperability issue is very critical, as interoperability is required for terminal equipment, transaction switching, interbank clearing and interbank settlement. The risk here is non co-operation among the providers to build a broad basis of an interoperable network. According to Lyman et al. (2008) there are a large number of different mobile handsets and it is a big challenge for banks to offer mobile banking solution on any type of device. Some of these devices support Java2ME and others support SIM Application Toolkit, a WAP browser, or only SMS. The desire for interoperability is largely dependent on the banks themselves, where installed applications (Java based or native) provide better security, are easier to use and allow development of more complex

capabilities similar to those of internet banking while SMS can provide the basics but becomes difficult to operate with more complex transactions. Similarly Gartner (2009) reported that the mobile handset sales in developing markets is skewed, in which contribution of enhanced phone is 47%, basic phones is 43%, entry level smart phones is 7% and featured smart phones is 3%. He further stated that in India maximum banks allow mobile banking on GPRS only, a big hurdle for increasing the customer base in India because such service cannot be availed on all handsets due to interoperability problem. Banzal (2010) stated that with a host of device operating systems and networks make application development for the wireless internet a formidable task. While WAP has been a very important in the evolution of the wireless internet and in turn mobile banking, there are problems/difficulties with the standard, such as the lack of WAP enabled devices and security issues. The lack of standards gives rise to lot of local and fragmented versions of mobile banking lacking interoperability. Further Agrawal (2007) stated that overcoming interoperability issues, however, have been localized, with countries like India using portals like R-World to enable the limitations of low end java based phones, whereas, South Africa have defaulted to the USSD as a basis of communication achievable with any phone. The desire for interoperability is largely dependent on the banks themselves, where java enabled applications are of better security, easier to use and offer development of more complex transactions similar to that of Internet Banking while SMS can provide the basics but becomes a hassle to operate with more difficult transactions. Bankers and telecom operators need to come out with common platform to tackle this interoperability issue for success of mobile banking.

3. Objectives

- to study the significance of interoperability and standardization issue in mobile banking in India.
- to study the gaps in regulations related to mobile banking on the basis of statement wise analysis of interoperability and standardization issues in mobile banking in India.

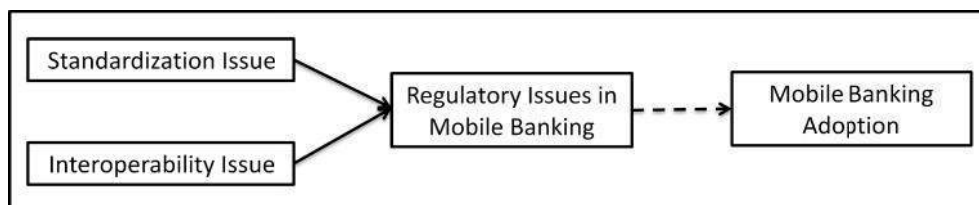


Figure 1. Conceptual Model

4. Research Methodology

4.1. Research Design

This study aimed to explore the interoperability and standardization issues in mobile banking, so a descriptive design was adopted for the same. This research design was cross sectional in nature and was carried out from perspective of banks and Reserve Bank of India.

4.2. Sampling

Sampling frame for the study consisted of senior bank managers of commercial banks and Reserve Bank of India who were directly dealing in mobile banking. In the light of unavailability of exact number and the location of such units of analysis and further the fact that they were hard to reach, so a ‘multiple entry non-discriminatory exponential snow ball sampling’ method was adopted. With multiple entry & non-discriminatory concept in the sampling technique selected, intention was to minimize selection bias inherent in snowball sampling method and to improve representativeness, as suggested by Atkinson and Flint (2001); Jacobsen and Landau (2003).

4.3. Questionnaire and Content Validity

First a preliminary questionnaire was designed. As recommended by Joreskog (1993) minimum two items per construct were ensured while preparing questionnaire. Interoperability construct has total 5 items and Standardization construct has total 3 items. To ensure that the items in preliminary questionnaire were measuring what they were supposed to measure, the content validity was ensured. For this preliminary questionnaire was forwarded to ten subject experts and psychometric experts. A total of two structured responses were received on the basis of which one item measuring to interoperability issue was added in the questionnaire (IO5).

4.4. Data Collection

Data was collected through email administered questionnaire (Google Doc version). Questionnaire was administered to 309 respondents, where finally 39 responses were received.

4.5. Data Cleaning

Data cleaning involved initial check for missing values and outliers. Data was checked for missing values after data collection where no such missing values were found. For detecting outliers, standardized values (z scores of items) were estimated using SPSS10. No outlier was detected ($|z| < 3$, no outlier; Barbara, 2006).

4.6. Data Reliability & Internal Consistency

To check if all items measuring particular construct were consistent with the averaged behavior of the other items measuring the same construct, an item-total correlation test was performed. Corrected item to total correlation for interoperability scale (total items 5) ranged from .581 to .802 with alpha value .809, suggesting internal consistency thus no item to be deleted. For standardization subscale (total items 3) corrected item to total correlation ranged from .837 to .837 with alpha value .910, suggesting internal consistency thus no item to be deleted.

4.7. Convergent & Discriminator Validity

For ensuring construct validity of scale, convergent and discriminator validities were estimated using product moment correlation matrix of 8 items measuring 2 constructs viz. standardization and interoperability. Analysis suggested convergent validity, as moderate to strong correlation with highest value .789 and lowest value .549; all significant at .05 was present between items measuring the same construct. Further no strong correlation was found between items measuring different constructs which suggested presence of discriminator validity.

4.8. Data Normality

Data normality was ensured by estimating and analyzing skewness & kurtosis indices. The skewness indices for the dataset ranged from -2.01 to +2.87. Thus all values were within recommended range of -3 to +3 (index value < |3|, normal; kline, 2005). Similarly kurtosis indices ranged from -3.34 to +8.98 i.e. all values within recommended range of -10 to +10 (index value < |10|, normal; kline, 2005). Hence, data was regarded as univariate normal.

5. Analysis and Findings

5.1. Descriptive Statistics

Data obtained was first subject to descriptive statistics (*Table 1*) using SPSS10 to explore opinions and perceptions of respondents for the select issues on 7-point semantic differential scale (1= agree, 7= disagree). Interoperability was found to be the more critical issue, followed by standardization issue by the respondents.

Table 1. Descriptive Statistics

Issue (<i>average score</i>)	Minimum	Maximum	Mean
Interoperability	1.75	4.00	2.061
Standardization	1.00	6.00	2.448

5.2. Significance of Issues/ One Sample t Test

To analyze significance of the select issues in mobile banking with respect to population, data was further subject to One Sample t test with test value equal to 4 (*Table 2*).

Table 2. One Sample t Test

Issue	Mean	t	df	Sig. (2-tailed)
Interoperability	2.061	14.514	38	.000
Standardization	2.448	8.061	38	.000

It is evident that mean value of interoperability issue 2.06 ($M < 4$, $t=14.51$, $df=38$) is significantly different from the test value of 4 at 0.001 level (*Table 3*). It may therefore be said that *interoperability is a significant issue in mobile banking*.

It is also evident that mean value of standardization issue 2.44 ($M < 4$, $t=8.06$, $df=38$) is significantly different from the test value of 4 at 0.001 level (*Table 3*). It may therefore be said that *standardization is a significant issue in mobile banking*.

5.3. Priority of Issues

Further to identify which of the issues is more prominent and shall be addressed on priority, data obtained using ordinal scale (ranks) was subject to Friedman test & Kendall's W test, followed by Wilcoxon Signed Ranks test as a post hoc test.

5.3.1. Friedman Test & Kendall's W Test

Firstly Friedman test was conducted to evaluate differences in mean ranks of the two issues in mobile banking. Here, Chi square value ($df=1$, $N=39$) of 39.45 was significant at .01 level. Hence, it is evident that the *mean ranks of the select issues are significantly different* (*Table 3*).

Table 3. Friedman Test

N	39
Chi-Square χ^2	39.459
Df	1
Sig.	.002

Further, Kendall's W test was conducted to measure effect size of difference (Table 4). Here, Kendall's coefficient of concordance of .51 indicated strong differences between interoperability and standardization issues (Green and Salkind, 2008).

Table 4. Kendall's W Test

N	39
Kendall's W	.513
Df	1
Sig.	.002

5.3.2. Wilcoxon Signed Ranks Test

Once a significant difference in mean ranks of the two issues was found, next a Post hoc was conducted to find out which is most critical (lowest mean rank) and which is least critical issue (highest mean rank). Pairwise comparisons of mean ranks of select issues was done using Wilcoxon signed ranks test and their rankings were tabulated (Table 5). It is evident that *in mobile banking, interoperability is more critical issue than standardization issue* ($Z = -2.586$; $p < .05$).

Table 5. Paired Wise Comparison in Ranks Test

Ranks Test	RANK Interoperability – RANK Standardization
Z	-2.586*
Sig (2-tailed)	.011

*Based on Positive Ranks

5.4. Analysis for Regulatory Framework/ One Sample t Test

For analyzing existing regulatory framework of mobile banking in India and its application, item-wise analysis (items pertaining to select issues) was done using One Sample t test (Table 6).

Table 6. One-Sample t Test for Regulatory Framework

Item	T	Mean	Sig.	Item	t	Mean	Sig.
IO1	11.079	2.05	.000	SD1	7.282	2.55	.000
IO2	14.442	1.95	.000	SD2	7.979	2.33	.000
IO3	18.019	1.69	.000	SD3	7.543	2.49	.000
IO4	14.951	2.46	.000				
IO5	8.356	2.14	.000				

As it is evident that mean value of IO1; 2.05 ($M < 4$, $t=11.079$, $df=38$) is significantly different from the test value of 4 at 0.001 level (Table 7). It may therefore be said *that in mobile banking there is lack of common technology protocol.*

It is also evident that mean value of IO2; 1.95 ($M < 4$, $t=14.442$, $df=38$) is significantly different from the test value of 4 at 0.001 level (Table 7). It may therefore be said that *offering mobile banking services on any type of mobile handset is a challenge due to difference in support technology.*

It is also evident that mean value of IO3; 1.69 ($M < 4$, $t=18.019$, $df=38$) is significantly different from the test value of 4 at 0.001 level (Table 7). It may therefore be said that *various telecommunication technologies viz. GSM, CDMA, GPRS pose a challenge in offering mobile banking, as each of these requires different support technology.*

It is also evident that mean value of IO4; 2.46 ($M < 4$, $t=14.951$, $df=38$) is significantly different from the test value of 4 at 0.001 level (Table 7). It may therefore be said that *all mobile banking service providers should adopt common ISO 8583 message format to ensure interoperability among banks.*

As it is evident that mean value of IO5; 2.14 ($M < 4$, $t=8.356$, $df=38$) is significantly different from the test value of 4 at 0.001 level (Table 7). It may therefore be said *that in mobile banking, offering services through GPRS poses hurdle due to handset interoperability.*

It is also evident that mean value of SD1; 2.55 ($M < 4$, $t=7.282$, $df=38$) is significantly different from the test value of 4 at 0.001 level (Table 7). It may therefore be said that *it becomes difficult for the users availing mobile banking services from multiple banks, to deal with different SMS short codes of different banks.*

It is also evident that mean value of SD2; 2.33 ($M < 4$, $t=7.979$, $df=38$) is significantly different from the test value of 4 at 0.001 level (Table 7). It may

therefore be said that *the short code for a particular type of transaction should be standardized irrespective of bank.*

It is also evident that mean value of SD3; 2.49 ($M < 4$, $t=7.543$, $df=38$) is significantly different from the test value of 4 at 0.001 level (*Table 7*). It may therefore be said that *standardization of short codes will have a significant impact on the initial willingness to use mobile banking*

6. Recommendations for Regulators & Practitioners

On the basis of key findings of the study following recommendations were made:

6.1. Recommendations on Standardization Issue

Users availing mobile banking services from multiple banks find it difficult to deal with different SMS short codes of different banks. So Reserve Bank of India should issue guidelines to all banks providing mobile banking services to standardized short code for a particular type of transaction irrespective of bank.

Mobile service providers should focus on developing applications for low end java based phones (in India penetration of smart phones and high end java based phones is comparably low; but rising very sharply) like of R-World. Such concept has more perceived ease of use and further offers development and subsequent easy application of more complex mobile banking transactions similar to that of internet banking without using any short codes.

6.2. Recommendations on Interoperability Issue

Various telecommunication technologies viz. GSM, CDMA, GPRS and variety of mobile phones pose an interoperability challenge in offering mobile banking, as each of these requires different support technology & infrastructure. But in practice it is too early in the service lifecycle of mobile banking for interoperability to be addressed within the country. Solution for this would largely dependent on mutual understanding of banks, telecom operators and mobile handset manufacturers. Parties involved in mobile banking should develop this understanding soon to achieve economies of scale (EoS) in mobile banking and offer good services to customers.

To address interoperability issue mobile banking service providers should adopt common ISO 8583 message format. Once banking interfaces are well defined and money movements between banks follow the ISO-8583 standards, this interoperability issue would automatically get resolved.

Further banks should promote JAVA enabled application based mobile banking in India. As JAVA based phones being cheaper day by day in the country, this JAVA application based platform could resolve interoperability issues.

7. Conclusion

Current study focuses beyond the most obvious issues of security and privacy in mobile banking and empirically explores the interoperability and standardization issue in mobile banking in India. Further it makes an attempt to provide recommendations to regulators and service providers. Results showed that both interoperability and standardization issues are critical and must be addressed if regulators wish to have smooth diffusion of mobile banking in India. Further it was found that interoperability is more critical than standardization. On the basis of analysis for interoperability issue, situation calls for mutual understanding among banks and telecom operators; and up to some extent among mobile handset manufacturers also.

Further for standardization issue regulators should issue regulatory guidelines to standardized short code for a particular type of transaction. Mobile service providers also have an important role to play on both interoperability and standardization front. If they could develop mutual understanding and could agree to work using same platform, these issues could easily be addressed. Thus, study makes important implications for regulators and practitioners both. The limitation of the study was data collection approach. The use of self-reports to collect data may lead to the common method variance, a situation where true associations between variables are inflated. As far as scope of future research is concerned, there could be other issues such as network, customer illiteracy, customer authentication, coordination issue and other prominent issues could be studied from future prospective of Mobile Banking. Further one obvious area is non bank led model of Mobile Banking. Two models viz. bank lead and non bank led are different in approach in terms of involvement of parties (banks and telecom operators) & their roles, application of basic technology, realm of services offered. Certain issues pertaining to these 2 models would vary. This provides some good scope for future study on issues and challenges in non bank led model in India.

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Strategic Management of Human Capital Development on Employees Performance in Nigeria Cements Sector

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Abstract: The synopsis of strategic management of human capital development on employees performance in Nigeria cement sector, emphasize the relative roles of strategic management of human capital development in the Nigerian cement sector. The paper discuss number of factors that contributes to the success of Nigerian cement sector; these factors are skills, experiences, qualification of individual employees, ideas etc. The paper further examine that strategic management has helped the development of employees performance in the Nigerian cement sector. The researcher divided the cement sector into zones e.g. Lagos, Ibadan, and Ekiti. This resulted to total population of 750 employees in the cement industry as at the time the research was conducted. The Taro Yamae statistical formula was used to determine the sample size of 511. The researcher made use of primary and secondary source of data collection for the findings. The paper find out that constant training and development of employees has helped the cement sector to do well in their business operation which will help improved quality and innovation with the goal of gaining complete advantage through human resource. That the contribution of HCD can lead to organizational performance and effectively linked to changes in different business environment including micro and macro context.

Keywords: strategic management; human capital development; employee performance; cement sector

JEL Classification: M10

1. Introduction

Background to the Study

Cements are vital commodity in a country like Nigeria that is confronted by severe deficits in infrastructure. It is the most common and widely used building material in the world. It is a basic input in the construction of roads, bridges, drainages houses, etc. The history of Cement production in Nigeria dates back to 1957 when

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the three Cement plants were commissioned by the then Regional government of Northern, Eastern and Mid-western Nigeria. Till date, the industry has remained an import-substitution sector, while the price of Cement has continuously gone up despite successive government efforts including the presidential intervention in May 2011 to stop the trend. Although, one of the reasons for the price increase is obviously due to the laws of demand and supply which asserts that price increase occurs when demand is greater than supply .(Lead City Equity Research, 2013).

There are number of factors that contribute to the success of any giving firm. These factors include: Skills, Experiences, Qualifications, Ideas, Capital, etc. (Ulrich & Brockbank, 2005). All these factors are important but the most significant factor is the human capital. Since it is the people that will put the other resources to work; it should be given prompt attention by the management in order to achieve its organizational goals and objective. Therefore, human capital planning is aimed at ensuring that the right person is available for the right job and at the right time. This involves formulating forward looking plans to ensure that the necessary human effort makes possible for the survival and growth of the industry.

Also, manpower development is a process of intellectual and emotional exercise in which firms embark upon to improve its managerial capacity. Human capital consists of the knowledge, skills, and abilities of the people employed in an organization. (Bontis, 1999) defines human capital as the human factor in the organization, the combined intelligence, skill and expertise that give the organization its distinctive character. The human elements of the firm are those that are capable of learning, changing, innovating, and providing the creative thrust which if properly motivated can ensure that long term survival of the firm (Michael, 2008). It is strategically for firm to think of developing her human capital because the more firm invest on her human capital, the more the employee produce optimally.

Statement of the Problem

Business in Nigeria have been bedeviled with an era of economic retrogression, political insecurity, social injustice, mismanagement and embezzlement of the highest degree, maladministration, lack of inflow of prospective foreign investors and almost absence of local investors, insecurity of life and properties, moral decadence, population explosion, individual stagnation, and corruption which have assumed enormous proportion (Whitely, 2000). In view of this obvious state of affairs the results have been weak industrial and economic base leading to weak productive base, low foreign reserves, increasing inflation, unstable exchange rates, and common social unrest which invariably have brought about an avalanche of business failure in the Nigeria manufacturing sectors both in Public and Private Sectors of the economy.

Further studies show that there is a growing dearth of trained and experienced personnel at the top level of most firms with the growing and ever intense competition in every aspect of firms in Nigeria which have made many people to resort to subverting and side tracking the laid down rules and procedures. Similarly, as the problems of the economy persists in every industry with a lot more venturing into any visible means of survival as more business went into liquidation. This appears to be as a result of the neglect on human capital development. It is observed that many firms in Nigeria have neglected the continuous training and development of their employee because of several factors such dwindling resources, economic meltdown and declining business climate. Therefore, the question that this study seeks answers to is: what will be the effects of the neglect of human capital development on employees' productivity in the Nigerian cement manufacturing industry given the level of the scenario?

2. Objectives of the Study

The thrust of the study is to determine whether the strategic management of human capital development (HCD) has a positive effect on employee performance of the cement manufacturing industry in south-western Nigeria. The specific objectives of the study are:

- to determine whether strategic management of the human capital development has effect on employee performance;
- to examine whether strategic planning has a positive effect on employee productivity of the cement industry;
- to evaluate if strategic organization of human capital development has effect on employee profitability of the cement manufacturing industry.

3. Research Questions

This research work is going to attempt to provide answers to the following questions:

- does strategic management of human capital development have effect on employee's performance?;
- does strategic planning of human capital have effect on the employee productivity in the cement manufacturing industry?;
- does strategic organization of human capital development have effect on employee profitability?.

4. Test of Hypothesis

Three alternative hypotheses are to be tested as follow:

- strategic management of human capital development has no effect on employee performance;
- strategic planning of human capital has no increase employee productivity;
- strategic organization of human capital development has no effect on employee profitability.

5. Scope

The focus of the study is to determine whether the strategic management of human capital development has a positive effect on employee performance of the cement manufacturing industry in south-western Nigeria. The independent variables are the strategic management of human capital development (HCD), strategic planning of human capital development (HCD), strategic organizing of structural capital aspect of human capital development, strategic staffing of the brain power aspect of human capital development, strategic leading of the intangible asset aspect of human capital development, and strategic controlling of the human resource aspect of human capital development.

The dependable variables are employee performance, employee productivity, employee profitability, liquidity, efficiency and effectiveness. The selected cement companies to be studied are as follows:

Lagos State of Nigeria

Lafarge Cement wapco Nigeria PLC

Location: Alausa, Ikeja Lagos, Nigeria

Obajana Cement PLC

Location: Falomo, Ikoyi, Etiosa, Lagos, Nigeria.

Dangote Group

Location: Falomo, Ikoyi, Etiosa, Lagos Nigria.

Bua Group

Location: Victoria Island, Etiosa, Lagos, Nigeria

Laserak Global Enterprises

Location: Alapere Ketu, Kosofe, Lagos, Nigeria

All the selected companies have their head quarters, factories and depot located in south-western Nigeria. The time scope of the studies is three years from October 2012 to October 2015.

6. Population of the Study

The target population for this study was restricted to the cement manufacturing companies. The stratified sampling procedure was adopted to classify the companies into two major strata namely old cement manufacturing (those in existence before 1990) and new cement manufacturing companies (those established and incorporated after (1990). Then a systematic sampling will be used to select the desired number of cement manufacturing companies and respondents from each stratum and company respectively. Specifically, the population of this study comprised of the following:

Lafarge Cement Wapco Nigeria PLC;

Alausa, Ikeja Lagos, Nigeria =191

Obajana Cement PLC;

Falomo, Ikoyi, Etiosa, Lagos, Nigeria. =232

Dangote Group;

Falomo, Ikoyi, Etiosa, Lagos Nigeria. =82

Laserak Global Enterprises;

Alapere Ketu, Kosofe, Lagos, Nigeria = 87

Cement Factory.

29, Ajibosun Street, Ado-Ekiti, Nigeria =158

Source: Cement Industry

7. The Sample and Sampling Technique

This study adopts the stratified and systematic random sampling method. Using this method, the researcher intends to first stratified the cement manufacturing companies into old and new generation on the basis of whether they are in existence before 1990 or not; then the researcher will apply an appropriate systematic sampling method to determine the sample size from each stratum and the number of respondents from each selected cement manufacturing company. In addition, stratification of the respondents from each company was strictly based on their ranks and managerial levels. In calculating the sample size for this study, the researcher applied the statistical formula for selecting sample from a finite population as propounded by Taro Yamane (1964).

The mathematical method for a two tailed test is stated as follows:

Where: $n = \frac{N}{1 + Ne^2}$

n = sample

n = the entire population

1 = theoretical constant

e = proportion of sampling error in a given situation, in this case (0.05/2) i.e 0.025 for a two tailed test.

Assigning values to these symbols, the sample size is calculated thus:

$$n = \frac{750}{1 + 750(0.025^2)} = \frac{750}{1 + 750(0.000625)} = \frac{750}{1 + 0.46875}$$

$$= \frac{750}{1.46875} \quad n = 511$$

By the use of stratified sampling, the distribution of the sample size to the cement manufacturing companies studied is as follows:

Lafarge Cement Wapco Nigeria PLC $\frac{191}{750} \times 511 = 130$

Obajana Cement PLC $\frac{232}{750} \times 511 = 158$

Dangote Group $\frac{82}{750} \times 511 = 55$

Laserak Global Enterprises $\frac{87}{750} \times 511 = 60$

Cement Factory $\frac{158}{750} \times 511 = 107$

TOTAL = 511

8. Significance of the Study

This research work is significant because it will produce information on effect of strategic management of human capital development on employee performance of the cement manufacturing industries in south-western Nigeria that would be useful to:

- the shareholders of the cement companies who will want to know whether strategic management of human capital development will make the companies do better and maximize their wealth;

- the members of the boards of directors of the cement companies who will formulate policies on strategic management of human capital development on employee's performance;
- the managers, supervisors, and junior staff of the cement companies to be studied. this is because they will implement the policies formulated by the members of the boards;
- the stakeholders, contractors, consultants, suppliers, capital providers, government agency who will want to get their money paid when it falls due;
- the customers of the cement companies, to who will want good quality cement product;
- researchers and students of strategic management of human capital development, performance, management, production management, and business administration. they will want material on the topic for their work.

9. Limitations of the Study

The limitation of the study from the researcher perspective focuses on the distance of one cement factory plant to another, in order to source for relevant information that will help the researcher great deal on the work. Also, the time spent in visiting several cement factories were limited in other to meet the target.

10. Review of Literature

Strategic management cuts across every section of a firm and in every firm. It is the process of deciding the type of business organization should undertake, forming the strategic vision for the firm, infusing the organization with a sense of purpose, providing long term direction, and establishing a clear mission to be accomplished. According to Thomson (1995), the effort of strategic human capital development on employee performance is a strategy itself. For a firm to think on how to invest on her human capital, it is a strategic way of getting a higher level of performance. So, human capital development is a strategic management option.

Highman (2012) and Barney (1999), propose that sustainable competitive advantage is attained when a firm has a human resource pool that cannot be imitated or substituted by its rivals. Boxall (1999), refer to this situation as one that confers human capital advantage. But he also notes that a distinction should be made between human capital advantage and human process advantage. Schultz (1993), defines human capital as a key element in improving a firm assets and employees in order to increase performance as well as sustain competitive

advantage. To sustain competitiveness in the firm, human capital becomes an instrument used to increase performance.

11. Strategic Human Resource Management

According to Werbel and DeMarie (2005), HCD practices create procedures that constitute the building of employees' knowledge and skills throughout the organization to promote valued and unique organizational competencies which support competitive advantage. Strategic HCD is a new paradigm in managing HR in the modern organization which is hinged on the understanding that the most critical resource that any organization must provide itself of is HR, since it is the HR that is responsible for coordinating the other factors of production to spur corporate performance.

Strategic HCD aims to achieve strategic fit. It produces HR strategies that are integrated vertically with the business strategy and ideally an integral part of that strategy. Vertical integration is necessary to provide congruence between business and HR strategy so that the latter supports the accomplishment of the business strategy and help to define it. HCD is also about horizontal integration which aims to ensure that the different elements of the HR strategy fit together and are mutually supportive (Armstrong, 2008). It enables strategic decisions to be made that have a major and long-term impact on the behavior and success of the organization by ensuring that the organization has the skilled committed and well motivated employees it need to achieve competitive advantage. Cooke et al (2005) asserted that HCD is an efficient function that copes with environmental changes. It directly and indirectly benefits companies because it changes passivity into initiative, transmits organizational goals clearly and encourages the involvement of line managers.

However, Marchington (2008) argue that HCD positively influences firm performance because it generate structural cohesion, an employee-generated synergy that peoples a company forward, enabling the firm to respond to its environment while still moving forward. Cooke et al (2005) investigated the HRM practices of firms in declining industries. They found that most high performance firms adopted HCD measures. Conversely, low performance firms tended to employ conventional methods. Various researchers found positive relation between HRM practice and firm financial performance. They found that the strategic orientation of HR in high productivity firms differed obviously from that in low productivity firms (Appelbaum et al., 2000; Guest et al 2000; West et al., 2002; Purcell et al. 2007).

Developments in HCD thinking are thus explored through the best-fit, best-practice and configuration approaches which have a profound impact in the understanding

of the contribution SHRM can enhance organizational performance, through increased competitive advantage and added value. Indeed, it becomes clear that whether the focus of HCD is on alignment with the external context or on the internal context of the firm, the meaning of HCD can only be really understood in the context of organizational performance, whether that be in terms of economic value added and increased shareholder value; customer value added and increased market share or people added value through increased employee commitment and reservoirs of employee skills, knowledge and talent. According to Guest (2001), theoretical research shows that HCD practices are not standardized and as such researchers tend to select a set of HCD practices depending on the theoretical perspective as determinants of firm performance (Lepak et al., 2005).

The bundle of HRM practices of this study is adopted from the study by Ahmed and Schoreder (2003) and includes: selective resourcing, training and development, use of teams and decentralization, sharing information and incentives on performance.

The term human capital was originated by Schultz, (1961) who elaborated his concept in (1981) consider all human abilities to be either innate or acquired attributes which are valuable and can be augmented by appropriate investment in human capital. Human capital is the most important element in an organization. It is an aspect of management studies that every organization needs to give priority attention (Thomson, 2004). Firm that fails to invest in its human capital and work environment will face erosion of product and services as well as diminished capacity to compete globally (Chandler, 1999).

Strategic management of human capital development has had a positive effect on organizational performance in many business industries in general and in the cement industry in particular from time immemorial. In 1960 and until date three different trend, cement manufacturing in Nigeria has been in existence since colonial days and has been as old as the life stone deposit, the construction of houses using mud was found not to have good strength of materials as mud building could easily collapse. Houses built with cement lasted longer and were stronger, cement use to make the houses look more dependable and aesthetic (Jha, 2000).

The strategic management model has four important parts namely: environmental scanning, strategic formulation, strategic implementation, evaluation and control. The model is a representation of abstraction of reality but not reality itself. This is because not all the factors in the real system have been in the model but only the significant once. If this is not done the model, it will be very cumbersome to predict, analyze and implement. A system is integrated as parts or elements that have an interface with the environment which can be open, partially open, or partially close or closed.

In the open system, the inputs and output are all in the environment in the close system. These three elements of the system are separate from the environment. Partially open and partially close systems are somewhere in between (Taha, 2008). Environmental Scanning comprises of monitoring, evaluating, and disseminating information from the external and internal environment to the key people in the cement manufacturing company. The environment is a totality of the forces and the variables that affects the managers, supervisors, and workers of the cement manufacturing firms when they are doing their work.

In explaining strategy (Drucker, 2004) provided answers to two questions; what business are we in? And what business are we going to be in the future? (Chandler, 2004) explains strategy as a way or a tool for ensuring organizational growth. There are two types of growth: internal and external growth. Internal growth includes expansion, market development, product development and diversification. External growth includes mergers, oppositions, takeover, consolidation and venture relationship e.g. Nigerian National Petroleum Cooperation (NNPC) and Shell Petroleum Development cooperation of Niger (SPDC) Limited, Agip, Total Fina Elf venture relationship (Central Bank of Nigeria 2005).

Unymadu and Igwe (2012), explain strategy as a course of organizational goals and objective through the use of such elements as product-market scope, goals and objectives, growth vector, competitive advantage of distinctive competence, development of emphasis and synergy. Strategy formulation is the process of designing strategies. Strategy implementation is the process of ensuring that the strategies formulated are functioning in the organization. Evaluation is an analysis to find out if the objective and goals from the strategic management process are being achieved. Controlling is that aspect of strategic management that comes after the planning by setting target, evaluating performance and measuring it, doing variance analysis, aggregating controllable and uncontrollable variables and continuing if the goals and objective are being achieved and correcting action if they are not being achieved (Kont'z, Donnell and Weirich, 2000).

The entire workers that provide their brain power and all the tangible and intangible ownership that make them reason logically as human being to be able to do their work. It is very necessary for the cement manufacturing company to invest in (HCD) in order to ensure organizational performance. A cement company that does not invest on HCD and does not emphasis the training and development of their senior and junior Staff would find it difficult to survive and meet the challenges of globalization, competition, and organizational change. (Bernard, 2004) defined an organization as a group of people that come together to cooperate and satisfy their needs which they could not have done staying alone. In the task model of such authors like Fredrick Taylor, Chester Barnard, and Henri Fayol the emphasis in the performance and how to do the job. The third perspective of organization performance is the extent to which the behaviors of the staff of the

cement companies are patterned to strive to achieve the organizational goals and objectives.

12. Methodology

12.1. Research Design

The research design choosing in the study is a combination of a survey, oral interview, and model modification.

12.2. Sources of Data

Both primary data and secondary data are used. The Primary data are obtained from the field work. The secondary data are from test books, journals, technical magazines from the internet, and the internal publication of the Cement Manufacturing Company.

12.3. Description of the Research Instruments

Three research instruments are to be used namely: a questionnaire, Oral Interview Schedule Synonymous (Yes or No) Oral interview schedule.

12.4. Description of Data Presentation and Analysis Tools

The data presentation tools will be tables. The data analysis tools will be percentages, relative frequencies Z-test and the Z- test of population proportions for testing the three hypotheses.

12.5. Validity of the Instruments

The table of random numbers will be used to select the samples of 511 respondents and the same version of instrument will be administered to the respondent and this gives the instruments content validity.

12.6. The Reliability of the Instruments

The test re-test reliability is to be used, the respondent are to be ask questions related to the objective at the point in time and the scores are correlated.

Spearman's Rank correlation coefficient of 0.95 which is very close to 1 gives the instrument reliability.

12.7. Area for Further Studies

This study has empirically determined the strategic Human Capital Development on Employees Performance in Nigeria Cement Sector. It will be worth while if this study is replicated for Educational sector of the economy for a better generalization of both the real and service sector of the Nigeria economy.

12.8. Contributions to Knowledge

Strategic human capital development on employee's performance was successfully examined via selected cements industry in Nigeria. The study revealed that developing human capital help to boost the morale of the employees in the cement industry which has contributed greatly to the development of the manufacturing sector. The Nigeria business managers particularly in the cement sector will learn that man power development is never a waste but a profit at the long run to the individual employee. Organization will also learn that building oneself is advantageous for maximum input on a job.

13. Conclusion

This paper reviewed and examined the relevant literature and the considerable discussion and deconstruction of HCD various elements of competitive strategies, furthermore linked between the elements HCD competitive strategies. The researchers have examined the way in which HR policies and practices may be used to provide coherent and comprehensive HR bundles. It is also suggested that the best way HRM should be delivered is through a positive impact on organizational performance by reviewing and examining how HR strategies can be aligned with wider organizations depending on business strategy or product market circumstances. This approach is useful not only for countering the more simplistic versions to reflect organizational reality-at least at a broad level.

The approaches view HR as having an important role in supporting organizational strategy and still play an important role in developing HCD. Generic HR processes can benefit from best practice theories while best fit should be applied when context matters to align management and employee interests. Competitive strategies are deemed strategic in linking HR policies and practices to the goals of the business and the external context of the firm, and are therefore contributing in different ways to performance. Increasingly, many firms are pursuing competitive strategies aimed at cost reduction.

Quality improvement and innovation with the goal of gaining competitive advantage through HR. Conclusively, the contribution that HCD may make to an organization's performance and effectiveness is closely linked to the changes in different business environment including macro and micro contexts, thus the bundling of these practices with the competitive strategy of the firm.

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An Application of Conjoint Analysis to Consumer Preference for Beverage Products in Nigeria

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Abstract: Conjoint analysis is a technique for establishing the relative importance of different attributes in the provision of a good or a service. In this study, conjoint analysis was applied to characterize beverage product preferences for customers' information during buyer-seller purchasing decision interactions. It identify the influence certain consumers preferences have on beverage purchasing behavior. Using focus group discussion, major attributes were specified. The attributes were then used to generate a plan card using the orthogonal array method. A conjoint based survey using 29 ranked beverages attributes formed the basis of the questionnaires that were randomly administered to 200 purchasers' of beverages drinks between January and March 2013 to specify their preferences. Conjoint analysis was used and the result indicates that the preference range that would deliver the most utility for beverage consumers include products attributes such as reduced price (-0.478), cylindrical package (-5.822), moderately dissolving beverage granule (-1.833) and taste (-0.333). The findings conclude that producer need to take the issue of packaging serious in production by ensuring that their product is packaged in cylindrical container which will attract optimum attention of consumers thereby leading to profitability in the long run.

Keywords: beverage; conjoint analysis; customer value; product attributes; part-worth

JEL Classification: M31; L81; L66

1. Introduction

1.1. Background to the Study

The increased menu of products and services offered by manufacturing sectors and the increased competition has forced the market participants to evaluate how they can differentiate their products and services from those of competitors. If a producer can determine what is important and what is not important to a customer,

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he/ she has the potential to become more competitive by segmenting the market and providing the desired products and services to the segmented customers.

Verlegh and Steenkamp (1999) argued that consumers are constantly confronted with a wide variety of product information, supplied through packaging, branding, advertising and other channels. Although, the information is used by consumers to form preferences and purchase decisions, it also elicits emotions, feelings, imagery, and fantasies (Verlegh and Steenkamp).

The widespread consumption of beverages by consumers leads to exponential increase in variety of beverages made available in the market. To meet users'/ consumers' needs, innovative features and modifications are continuously being added to beverages to make them appeal to many consumers. Consequently, a beverage which is essentially transformed to liquid consumables has undergone numerous transformations, making its appearance to consumers more deceptive for purchase decisions. Understanding exactly what consumers require or desire from beverage poses a challenge for many producers. Little is known about the importance consumers place on the various attributes involved in the provision of beverages. The purpose of this study is to identify the attributes that consumers' desire in their purchasing decision of beverages using conjoint analysis, since one of the major purposes for the use of conjoint analysis is to measure consumer preferences among competing products and services.

Conjoint analysis is a multivariate technique which has been widely used in marketing research to understand how consumers develop preferences for different products or services (Bonilla, 2010). It allows estimating consumer's preferences of a product by combining part worth utilities for each attribute.

This analytical method is built on the assumption that consumers make complex decisions based not on one feature or attribute at a time, but on several features jointly. Thus, a properly executed conjoint study can be used to guide pricing tactics and strategies and provide data for measuring cross-price elasticity between beverage products, especially in an emerging market like Nigeria.

1.2. Statement of Problem

Beverage products are becoming number one on list of items an average student in Nigeria higher institutions ask for when leaving their home for school environment thus majority of beverage products manufacturers' target student. The purpose of this study is to develop a better understanding of consumer preferences for beverages attributes in Nigeria market. Specifically, to evaluate which types of packaging, taste, solubility, availability and price will be more convenient and attractive to the Nigeria student as market segment (who usually spends more of its

time away from home) in terms of the attributes influencing consumer's (student) intention to purchase as well as the factors that affect these preferences.

1.3. Objectives of the Study

The aim of this study to apply conjoint analysis to the consumer preferences for beverages products in Nigeria while the specific objectives are to:

- identify the attributes that consumers' desire in their purchasing decision of beverages;
- apply conjoint analysis to guide pricing tactics and strategies for beverage products;
- measure cross-price elasticity between products.

1.4. Research Questions

- what are the attributes that consumers desire in their purchasing decision of beverage product in Nigeria?;
- is conjoint analysis suite to guide pricing tactics and strategies for beverage products?;
- can conjoint analysis provide be used to measure cross-price elasticity between products?

1.5. Significance of the Study

Beverages has become one the major item on the list an average student going to school with in Nigeria and there is dearth of literature on conjoint analysis in the marketing field to identification of the preferences for extrinsic and intrinsic attributes for range of beverages products targeted at student in Nigeria University as specific market segments. The competition in the market is growing with attendant promotional activities and expenses which may not achieve the desired commensurate result if producer fails to determine what is and is not important to a customer (student). Therefore, there is need for this study to bridge the gap in literature.

2. Literature Review

Conjoint Analysis Applications

Green, Krieger and Wind (2001) reported that conjoint analysis evolved from the seminar research of Luce and Tukey (1964). Their theoretical contributions were put to use by a number of psychometricians, including Carroll (1969), Kruskal (1965), and Young (1969). These researchers developed a variety of nonmetric models for computing part-worths (attribute-level values) from respondents' preference orderings across multiattributed stimuli, such as descriptions of products or services. Conjoint analysis is, by far, the most used marketing research method for analyzing consumer trade-offs. Surveys conducted by Wittink and Cattin (1989) and Wittink, Vriens, and Burhenne (1994) attest to its world-wide popularity.

Green *et al*, further opines that it is not difficult to see why researchers developed and applied conjoint analysis so rapidly because conjoint analysis deals with a central management question: Why consumers choose one brand or one supplier over another? Also, marketing research practitioners want to be part of something new, and computer software for implementing the methodology became readily available.

Hair, Anderson, Tatham and Black (1995) as cited in (Schaupp and Bélanger, 2005) revealed that conjoint analysis is a research technique used to estimate or determine how respondents develop preferences for products or services, and to measure the trade-offs people make when making a decision.

Conjoint analysis is based on the premise that subjects evaluate the value or utility of a product/ service/ idea (real or hypothetical) by combining the separate amounts of utility provided by each attribute, in this study beverage attributes values. Conjoint analysis is a de-compositional technique, because a subject's overall evaluation (preference) is decomposed to give utilities for each predictor variable, and for each level of a predictor variable. Conjoint analysis is commonly found in behavioral studies (Green & Srinivasan, 1978) and in marketing studies (Green & Rao, 1971) where the predictor variables are called attributes, and the dependent variable is often an overall evaluation of a product. A conjoint analysis study has two primary objectives. The first is to determine the contributions of various predictor variables and their respective values (or levels) to the dependent variable (usually overall evaluation). The second objective is to establish a predictive model for new combinations of values taken from the predictor variables (Bajaj, 1998).

In a conjoint experiment the researcher constructs a set of hypothetical products by combining selected levels of each attribute, these combinations result in the design of the stimuli which is presented to the respondents. Consumers will provide their

evaluations on the basis of the behavior of interest, known as the choice task (Cardello, Schutz, and Leshner, 2007).

Approximately sixty percent of all conjoint studies are related to consumer goods (Cattin and Wittink, 1982). Applications of conjoint analysis are used primarily for new product or concept evaluation, pricing decisions, market segmentation, advertising, and distribution. Thus this study falls in the categories of beverage product evaluation and market segmentation.

Other studies that used conjoint analysis to examine buyer or user preferences for new food products or technology includes Harrison, Stringer and Prinyawiwatkul (2002), conjoint analysis to analyze preferences for three consumer-ready products derived from catfish. Again, in (2004) Harrison and McLennon used conjoint analysis to measure the preferences of U.S. consumers for labeling of biotech food. Deliza, MacFie, Feria-Morales, and Hedderley., (2000) applied conjoint analysis to study the effect of consumer expectations on the evaluation of instant coffee, and in (Deliza, MacFie, and Hedderley., 2003) used it to investigate consumer expectations using computer generated images of packages of an unfamiliar fruit juice (passion fruit). Sethuraman, Kerin, and Cron, (2005) worked with conjoint analysis to identify which product attributes consumers prefer for a new generation of wireless telephone handsets.

There are three steps involved in a conjoint study. The first step involves defining the product attributes and their levels. Typically, a conjoint study involves six or seven attributes. Once the attributes and levels are identified, it is necessary to define a set of hypothetical products that can be presented in different forms such as descriptive form, pictorial form or a prototype (Vriens, Looschilder, Rosbergen, and Wittink, 1998). Second, an experimental design and a choice of data collection method should be constructed; followed by the selection of measuring scale for the dependent variable and the estimation method for analysis of the data. Participants then are asked to evaluate their overall preference for the hypothetical product. The last step involves selecting the empirical model and estimating the buyer's part-worth utilities (Harrison, Ozayan, and Meyers, 1998).

Conjoint analysis is a technique for measuring trade-offs for analyzing survey responses concerning preferences and intentions to buy, and it is a method for simulating how consumers might react to changes in current products or to new products introduced into an existing competitive array. Researchers have used conjoint analysis for consumer and industrial products and services and for not-for-profit offerings (Green, Krieger and Wind, 2001).

In conjoint analysis, a product can be described as a combination of a set of attribute levels, where a utility value is estimated for each attribute level that quantifies the value that an individual places on each attribute level. The utility values, contributed by each attribute level, then determine purchasers' total utility

or overall judgment of a product (Green & Srinivasan, 1978). The product attributes and associated attribute levels used in this research were derived from a preliminary interview granted some seller and buyers of beverages product in the study area (see Table 1).

Table 1. Product Attributes and Associated Product Attribute Levels

Product attributes	Product attribute level
Design package	Pyramid Cylindrical Indented Cuboid' Sachet
Taste	Sugary Milk like Choco like
Solubility (dissolution)	Instant Moderate Slow
Availability	Readily Moderate Not readily
Price	40 naira 170 naira 640 naira

Source: Field Survey, 2013

The full-profile conjoint analysis approach was chosen for this study as it presented purchasers with realistic descriptions of alternative hypothetical beverage concepts (Green & Srinivasan, 1978). The orthogonal design procedure in SPSS, which used a fractional factorial design, made it possible to gather information on a large number of beverage concepts although purchasers only rated a limited number of beverage concepts (see Sorenson & Bogue, 2006). Importantly, the fractional factorial design maintained the effectiveness of evaluating the relative importance of a beverage's multi-dimensional attributes (American Marketing Association, 1992).

2.2. The Concept of Creating Value to the Customer

For understanding customer needs and studying them systematically it is necessary to be familiar with the concept of creating value to the customer. Walters and Lancaster (1999) have stated that value is created by any product or service attribute, which motivates the customer to buy the product and takes him closer to

achieving his goals. According to Woodall, (2003), attributes of a product or service that create value to customers can be divided into:

- factors that enhance customer’s benefits or help to satisfy his needs;
- factors that decrease customer’s costs.

Cost can be defined in the broadest sense as everything the customer has to give up in order acquiring the benefits offered by the supplier. Costs can be monetary as well as non-monetary (time spent, aggravation, risk). Benefits can be affected by a variety of factors (Woodall). Ferrell, Hartline, Lucas and Luck (1998) points out the following main factors as benefits: product quality, customer service quality and experience based quality (table 2). Band’s (1991) approach is essentially the same, but he also includes customer service personnel compliance to customer expectations because it is often found that customers can easily perceive the difference between the adequacy of company’s processes and the behavior of service personnel (Rosen & Supernant, 1998). Additionally, it is also often pointed out that brand can create value to customers (Best, 2000); and of course there are usually industry specific factors that customers perceive as valuable.

Table 2. Distinguishing the Sources of Benefits to Customers

Source of the Benefit	Example
Product quality	Functionality, reliability, additional features, customization based on customer needs, aesthetics, warranty, ease of use.
Quality of customer service processes	After sales support, delivery time, reliability of delivery, information about product, responsiveness in case of emergency, product return and compensation policy.
Quality of customer service personnel	Communication, quality of responses to requests, friendliness, professionalism, looks, helpfulness when solving problems.
Brand image	Main perception dimensions: sincerity, excitement, competency, maturity, vitality.
Emotions based Quality	Atmosphere of the sales place, PR, promotion events, emotions generated during service: trust, pleasure.

Source: Adapted from Ferrell et al., 1998; Band, 1991; Best, 2000; Walters, Lancaster, 1999; Woodall, 2003.

Although, a preference in selecting services or products has been widely used, many models have been in placed so far to analyse preferences. The preference models were widely used in new product design, marketing management, and market segmentation (Green and Srinivasan 1990; Wittink and Cattin). A decision is made after analysing preferences via numerous techniques. Decision is becoming more complex when preferences are based on multi-attributes products or services. One of the well-known analyses, especially in marketing and businesses that is believed to be able in helping decision makers was conjoint analysis. Conjoint

analysis was originally developed to study individuals' preferred levels and relative importance of the multiple attributes of market goods (Louviere, 1988). This technique coined by Green and Srinivasan (1978) is based on the assumption that individuals can evaluate multi-attributes in such a way that their responses are approximately intervals in a measurement level. Because the customer requirements elicited from one customer group may have considerable conflicts with another, a comprehensive evaluation of multicultural factors among diverse customer needs is crucial. The multivariate technique is used specifically to understand how respondents develop preferences for products or services. It is based on the simple premise that consumers evaluate the value of a service or product by combining the separate amounts of value provided by each attributes (Stamatis, 2003).

Recent research has used stated preference techniques such as stated choice and conjoint analysis to develop quantitative estimates of the relative importance on selected attributes of the services or products. Strength of stated choice and conjoint analysis methods is concentrated upon weights. Respondents are asked to express their preferences and provide importance weightings for a single attribute. At the same time, respondents are asked to rank, rate or choose among profiles that describe alternative configurations of the set of attributes under consideration. In recent years, conjoint analysis has been extended to study public attitudes and preferences concerning the provision and management of public goods (Dennis, 1998; Kneeshaw, Vaske, Bright, & Absher, 2004; Stevens, Belkner, Dennis, Kittredge & Willis, 2000).

2.3. Customer Preferences

In today's rapidly changing market, demand for a product which determines an enterprise strategy is often influenced by customer preferences (Fornell, 1992). Since products and services are closely related to their providers, the product preference can be regarded as the enterprise preference, that is, when a customer decides to consume a given product or service, he/she actually has preferred the producer or provider of that specific product or service. So, customer preference for a product can be defined along with the concept of brand preference. Brand preference is the extent to which the customer favours the designated service provided by his or her present company, in comparison to the designated service provided by other companies in his or her consideration set (Hellier, Geursen, Carr & Rickard, 2003). As Cao and Ramani (2010) stated, a customer's preferences for a product can be viewed as a reflection of his or her inner world. Therefore, it is the customers' attitudes and perceptions toward a product or company which determine their preference. Customers' demands and preferences of different products and services are the subject of concern for many business areas. However,

there is dearth of literature on the empirical evidence from emerging market like Nigeria and most especially on beverages products.

3. Methodology

This study was carried out in Osun State located in south-western Nigeria, and lies within latitude 7.0° and 9.0° N and longitude 2.8° and 6.8° E. Two hundred student of Obafemi Awolowo University (OAU) Ile-ife, were randomly sampled as beverage consumers that filled the questionnaires. The choice of Osun state was predicated on the fact that most student of OAU are from outside the town (i. e their parent are not resident of Ile Ife). The sample size of 200 respondents is justified for this conjoint study based on the report of Cattin and Wittin, 1982, that sample size in commercial conjoint study usually ranges 100 to 1000 respondents. This was also supported by the position of Akaah and Korgaonkar (1988) which states that sample size less 100 respondents is not sufficient for conjoint study. Thus, 200 respondents that filled these questionnaires were enough for reliable study.

In the course of this study, a preliminary survey was carried out using focused group discussion. Beverage consumers were interviewed at various beverage markets in order to determine some of the attributes consumers look for when selecting their product of choice. Five major attributes were specified which are packaging, taste, solubility, availability and price. As a general rule, the maximum number of attributes allowed in a traditional conjoint analysis is nine (Hair, Anderson, Tatham and Black, 1998). Green and Srinivasan (1990) reported that survey respondents may have difficulty assessing more than six characteristics, and also warned against “information overload”.

With five attributes (packaging, taste, solubility, availability and price) associated with $(5 \times 3 \times 3 \times 3 \times 3)$ levels respectively, there were 405 possible product combinations. Because the complexity associated with a larger number of choice sets in the design could affect respondent decisions, we minimized the number of choices using an orthogonal fractional factorial design. The IBM SPSS software was used to formulate 25 orthogonal attribute combinations, and 4 holdout additional combinations for validation.

The attributes were then used to generate a plan card using the orthogonal array method (Table 3) with the aid of statistical package for social sciences. These plan cards consist of different combination of the earlier specified attributes and this attributes were combined in 29 different ways including holdouts. These 29 cards formed the basis of the questionnaires that were administered to the respondents to rank their preferences. The questionnaires were administered to 200 respondents selected randomly from a list of beverage consumers in the study area. Since

conjoint analysis (CA) is based on the notion that consumers value products based on the utility provided by its attributes, information provided by the respondents were then analysed.

Table 3. Orthogonal Array Combination of Attributes of Beverage Product

	Card ID	design package	taste	Dissolution	availability	price
1	1	Cylindrical	Choco like	Instant	moderate	40
2	2	Cuboid	Choco like	Instant	Readily	640
3	3	Cuboid	Sugary	Slow	moderate	170
4	4	Indented	Choco like	Moderate	moderate	40
5	5	Sachet	Choco like	Slow	Readily	170
6	6	Cuboid	Sugary	Moderate	Readily	40
7	7	Indented	Milklike	Moderate	Readily	640
8	8	Sachet	Sugary	Moderate	Readily	40
9	9	Pyramid	Sugary	Instant	Readily	40
10	10	Indented	Choco like	Slow	not readily	40
11	11	Pyramid	Milklike	Instant	moderate	40
12	12	Sachet	Milklike	Moderate	moderate	170
13	13	Sachet	Sugary	Instant	not readily	40
14	14	Cuboid	Milklike	Instant	not readily	170
15	15	Pyramid	Sugary	Slow	moderate	640
16	16	Indented	Sugary	Instant	Readily	170
17	17	Sachet	Choco like	Instant	moderate	640
18	18	Pyramid	Choco like	Moderate	Readily	170
19	19	Cylindrical	Sugary	Moderate	moderate	170
20	20	Indented	Sugary	Instant	moderate	170
21	21	Cylindrical	Choco like	Instant	Readily	170
22	22	Cuboid	Choco like	Moderate	moderate	40
23	23	Pyramid	Choco like	Moderate	not readily	170
24	24	Cylindrical	Sugary	Moderate	not readily	640
25	25	Cylindrical	Milklike	Slow	Readily	40
26 ^a	26	Cylindrical	Choco like	Slow	Readily	170
27 ^a	27	Pyramid	Milklike	Instant	Readily	40
28 ^a	28	Pyramid	Milklike	Slow	not readily	170
29 ^a	29	Indented	Milk like	Instant	not readily	40

a. Holdout

The questionnaires were analyzed using IBM SPSS v20. The individual-level conjoint analysis procedure in SPSS calculated coefficients, expressed as utility values, which linked the attribute levels to changes in product ratings.

4. Results and Discussion

Table 4. Part-worth or Utility Estimate of Beverage Products Attributes

Attributes	Level	Utility estimate	Utility range	Importance (%)
Packaging	Pyramid	1.244	8.622	40.299
	Cylindrical	-5.822*		
	Indented	2.800		
	Cuboid	1.778		
	Sachet	2.220E-16		
Taste	Sugary	.533	0.866	10.751
	Choco-like	-.200		
	Milk-like	-.333*		
Solubility	Instant	.778	2.889	17.366
	Moderate	-1.833*		
	Slow	1.056		
Availability	Readily	.700	2.378	18.412
	Moderate	1.189		
	Not readily	-1.889*		
Price	40	-.478*	1.034	13.172
	170	-.078		
	640	.556		
Total			15.789	100.00

*Source: Data Analysis, 2013 *represents the most preferred level in the Attributes*

The result of conjoint analysis in Table 4 shows that the most important attribute to the consumers is packaging which contribute 8.622 to the consumers' total utility of 15.789 while the consumers most preferred category of packaging is cylindrical. This finding suggests the relative importance of packaging to consumers. Also, next in importance to the consumer is the solubility of the product, which contribute 2.889 to the consumers' total utility of 15.789 .The utility estimates indicate that the consumers have preference for moderately dissolving drink (-1.833) over instant (0.778) or slow dissolving ones (1.056). Contrary to a priori expectation, taste was the least important attribute (utility range = 0.866) considered by the consumers in making their choices; this could be as a result of majority of players in the beverage industry having reached a level in which the taste of their product becomes generally satisfactory to the consumers. Price also proved to be important (1.034), more than taste (0.866) and less than availability (2.375). Overall, the result indicates that the preference range that would deliver the most utility for beverage consumers would include products attributes such as

reduced price (-0.478), cylindrical package (-5.822), moderately dissolving beverage granule (-1.833) and taste (-0.333). Producers that deliver beverage within the stated preference range would have successfully delivered utility of 13.411 out of 15.789.

Furthermore, the derived utility values were then used to determine the importance of each attribute. Pearson's R, and Kendall's tau, association values were used to assess the validity of the conjoint analysis model. The Pearson's R (0.759) and Kendall's tau (0.544) values were high and indicated strong agreement between the averaged product ratings and the predicted utilities from the conjoint analysis model. This is validated by the position of the Green and Srinivasan (1990) that values close to one indicate strong agreement between the average product ratings and the predicted utilities from the conjoint model (see table 5).

Table 5. Correlations between Observed and Estimated Preferences

Correlation	Value	Sig.
Pearson's R	0.759	0.000
Kendall's tau	0.544	0.000

5. Summary and Conclusion

This paper demonstrated the application of conjoint analysis in assessing the beverage attributes that are important to consumers of beverages product in Nigeria. Findings from conjoint analysis provide information that may not readily be obtained from sampled respondents on their attribute preferences. The findings of this study show that combined attributes of price, packaging, solubility and taste are crucial in consumers' preference decision on beverage purchase and consumption. Producers need to take the issue of packaging serious in production, ensuring that their product is packaged in cylindrical container as the study reveals.

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Contribution of Internet Banking toward Profitability of Banking in India

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Abstract: The adoption of the Internet in the banking industry on the one hand is closely related to a change in the structure of the organization and nature of operations in banking industry itself, and on the other hand, to the emergence of computer as a significant organizational tool. Banks have always been striving to introduce new technologies to reduce operational costs and expand their businesses. This study is an attempt to investigate the contribution of Internet banking on the performance of the banking system in India. Return on Assets (ROA) and Return on Equity (ROE) ratios are used to test this effect. The regression analysis showed that there is a significant effect of Internet banking services on the profitability of banks in terms of ROA and ROE in India.

Keywords: Banking Performance; Internet Banking; Profitability; India

JEL Classification: G2; G21

1. Introduction

The introduction of e-banking in banking business is one of the most important innovations of the 20th century. It provides a large number of opportunities to the bank itself as well as the customers associated with bank that supplies e-banking services. The first benefit for the banks offering e-banking services is better branding and better responsiveness to the market. Those banks that would offer such services would be perceived as leaders in technology implementation. Therefore, they would enjoy a better brand image. The other benefits of e-banking can be named as expand of business, lower operational costs, less human errors, workers efficiency improvement and availability of services anytime and everywhere. The main goal of every company is to maximize profits and e-banking services offer a perfect opportunity for maximizing profits.

Banks have always been striving to introduce new technologies. Firstly it was the year 1846 when telecommunication was introduced into bank markets that reduced

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the stock price differential between New York and regional stock markets. The introduction of the trans-Atlantic cable equally enabled greater integration of securities trading in New York and London in 1866. This period is known as early adoption period of IT in the financial sector. During this period, banks' customers entered in the banking system directly through retail banking branches or indirectly through agency representative (such as saving banks, mortgage specialists and even retail outlets). Telephone conversations between bank managers and customers have been recorded in use as early as the 1890s, but, in spite of this, the service remained largely unaffected by technology with unchanged front office relationship and controlled locally through asynchronous analogue systems such as paper-based records and pass-book control. During the late 1930s, the first tabulating machine was purchased to address the growing volume of transactions. The second wave of IT innovation in retail finance begins in the late 1950s and lasted up to the late 1960s. Banks introduced computers to keep up with growth in business volume. The third wave of IT innovations in retail finance emerged hand in hand with advances in telecommunications. During the emergence period, banks became one of the world's dominant customers for computer-based applications, far exceeding other sectors such as capital goods manufacturers or transportation. Between 1968 and 1980 banks emerged as major customers of software and hardware as they involved in applications which delivered significant cost reductions as well as increased business volume and variety. The main difference between this and the specific application period was that the impact of computers was felt throughout the organization rather than in specific departments (Batiz-lazo and Wood, 2001).

There are always two sides to a coin. Similarly Internet banking too has a "bane" side to it. Banks offer e-banking services to expand market share or as a cost saving strategy to reduce paperwork and personnel. The Internet also provides banks with considerable opportunity to expand their customer reach beyond existing boundaries. Therefore electronic delivery channels operate in an uncertain legal and regulatory environment so that all these factors present new challenges for banks in managing security, integrity and availability of services. It is possible to categorize e-banking challenges in different groups such as: business, psychological, problem of security, operational and different kinds of risks associate with electronic delivery and micro economic challenges.

In the early 1990s, the Indian government embarked on the policy of liberalization. The government allowed new private banks to enter in the market. By licensing a small number of private banks, which came to be known as new generation tech-savvy banks, the government introduced greater competition in the Indian banking system. Several initiatives have also been taken by the government as well as the Reserve Bank of India (RBI) to facilitate the development of these new generation banks. Though ICICI bank initiated the e-banking facilities under the brand name

of 'Infinity' as early as 1997 however it got its due respect in the year 2000 when the government of India enacted the IT act 2000 with effect from 17 October 2000. This proactive action has provided legal recognition and security to electronic transaction and other means of electronic commerce for the Indian banking system and paved the way for the emergence and growth of e-banking in India.

On the recommendation of the committee on technology upgrading in banking sector headed by M. R Srinivasan, the RBI has issued a guideline in June 2001 on three major areas of Internet banking, i.e., (i) technology and security issues, (ii) legal issues and (iii) regulatory and supervisory issues. These areas are selected in such a manner that the problems faced by banks and their customers can be minimized to the maximum possible extent. The group recommended certain guidelines for the smooth and proper working of Internet banking. According to this guideline virtual banks that have no offices and function only on line are not permitted to offer e-banking services in India. Only banks that can acquire license under the Banking Regulation Act are those banks that have a physical presence. These banks are then allowed to offer such services. Besides, banks are required to report to the RBI about every breach or failure of security systems and procedures in Internet banking -while the RBI discretion may decide to commission special audit/inspection of such banks (RBI, 2001). This present research work devoted to look into the facts related to the impact of Internet banking on Indian banking system.

2. Internet Banking

Internet banking or cyber banking has changed the way business is conducted. By harnessing the information technology, banks have been providing varied financial services to their customers. The proliferation of the internet has changed the traditional business paradigms and is increasingly playing a significant role in improving the services in the banking industry. Consequently, it offers new possibilities for growth in the banking sector (Krishna and Vidya, 2008).

2.2 Types of Internet Banking

Currently, there are three basic kinds of website facilitating Internet banking in the marketplace:

- 1. Information Websites.** This is the most basic level of Internet banking. The bank has marketing information about its products and services on a stand-alone server. This level of Internet banking service can be provided by the bank itself or by sourcing it out. Since the server or website may be vulnerable to alteration, appropriate controls must therefore be in place to

prevent unauthorized alterations of data in the server or the website (Kumar et al, 2007);

2. **Communication Websites.** This type of Internet banking allows interaction between the bank's systems and the customer. It may be limited to electronic mail, account inquiry, loan applications, or static file updates. The risk is higher with this configuration than with the earlier system and therefore appropriate controls need to be in place to prevent, monitor and alert management of any unauthorized attempt to access bank's internal network and computer systems. Under this system the client makes a request to which the bank subsequently responds. It works on the same principle as the e-mail (Persumal and Shamugam, 2004);
3. **Transactions Websites.** Under this system of Internet banking customers are allowed to execute transactions. Relative to the information and communication types of Internet banking, this system possesses the highest level of risk architecture and must have the strongest controls. Customers' transactions can include accessing accounts, paying bills, transferring funds etc. These possibilities demand very stringent security (Persumal and Shamugam, 2004).

3. Review of Literature

The review of existing literature related to a research problem is the most important part of the academic research. It not only gives an insight into the nature and dimensions of the problem it also gives the information about the relationship among the various parameters and their degree of association. As we know that the studies in social sciences vary with the variation in the circumstances, literature review gives us the variation in results as the area/ region/ economy changes. The present research problem ' impact of Internet banking on banking performance' is also of the same nature where variation in economic infrastructure makes a difference in the result as the success of Internet banking is totally dependent on IT infrastructure and people attitude towards the adoption.

Prasad and Harker (1997), in their paper entitled "Examining the Contribution of Information Technology toward Productivity and Profitability in U.S. Retail Banking ", examined the effect of IT investment on both productivity and profitability in the retail banking sector. Using data collected through a major study of retail banking institutions in the United States, this paper concluded that additional investment in IT capital may have no real benefits and may be more of a strategic necessity to stay with the competition. However, the result indicated that there are substantially high returns to increase in investment in IT labour, and that retail banks need to shift their emphasis in IT investment from capital to labour.

Merenzi et al. (2000), in their study entitled “Is Internet Banking Profitable? A Study of Digital Insight's Offering”, forecasted profitability for institutions implementing DI's (Digital Insights) Internet banking applications. According to study DI provides an array of applications including home banking with electronic bill payment, check images, authenticated online applications, online statements modules, cash management, account aggregation, e-commerce financial services portal and online lending applications for consumer loans. The results showed that it is not possible to blindly state that Internet banking is always profitable, because very small institutions (with fewer than 15,000 customers) only offer a limited set of Internet banking services are not likely to achieve profit unless they are able to persuade a very substantial portion of their customers to bank online.

Polatoglu and Ekin (2001), conducted a research about Internet banking and its impacts. The results of this research suggest that Internet banking not only reduces operational cost to the bank, but also leads to higher levels of customer satisfaction and retention. Accordingly, it is argued that Internet banking is strategically important to the banking sector in an emerging economy, such as in Turkey.

Eyadat, M (2005), examines the impact of the progress in information technology on the profit and cost efficiency of the U.S. banking sector during the period of 1992-2003. The research shows a positive correlation between the levels of implemented IT and both, asset profitability and cost savings. These results indicate that introduction of the new range of services at a bank, on one hand, generate additional revenues, but, on the other hand, imply new significant cost changes.

Siam, A Z (2006), examined the impact of e-banking on Jordanian banks and concluded that the majority of the banks are providing services on the Internet through their websites and his findings showed that the attention is more on satisfying and fulfilling customers' needs through e-banking. He also concluded that there should be a well articulated strategy to achieve success and profits in the long run. Results revealed that electronic banking services have a negative effect on banks profitability in the short run due to the capital investment by the banks on infrastructure and training but will be positive in the long run.

Casolaro and Gobbi (2007), have analyzed the effects of investment in information technology (IT) in the financial sector in Italy. The result of the study showed that both cost and profit frontier shifts are strongly correlated with IT capital accumulation. Banks adopting IT capital-intensive technique are more efficient than others.

DeYoung et al. (2007), in their paper “How the Internet Affects Output and Performance at Community Banks” tried to compare two different waves of adoption of Internet banking to find out how the Internet can change the performance of banks. The first wave of US banks to adapt transactional banking

web sites in the late-1990s, and compare the change in their 1999–2001. Finding of the study shows that Internet adoption has improved the community bank profitability, chiefly through increased revenues from deposit service charges. Internet adoption was also associated with movements of deposits from checking accounts to money market deposit accounts. This is also responsible for the increased use of brokered deposits, and higher average wage rates for bank employees. The result shows little evidence of changes in the loan portfolio. Findings suggested that the initial click-and-mortar banks (and their customers) used the Internet channel as a complement to, rather than a substitute for, physical branches.

Onay et al. (2008), in their research on Turkish banks entitled “The Impact of Internet-Banking on Bank Profitability- the Case of Turkey”, investigated on the impact of internet banking on bank profitability. Their analysis covered thirteen banks that have adopted online banking in Turkey between 1996 and 2005. Their results showed that Internet banking starts contributing to banks’ ROE with a time lag of two years. According to their study, the Internet has changed the dimensions of competition in the retail banking sector. It has also provided opportunities for emerging countries to build up their financial intermediation infrastructure. According to study Internet banking variable has had a positive effect on the performance of the banking system in Turkey.

Malhotra and Singh (2009), in their paper described the current state of Internet banking in India and discussed its implications for the Indian banking industry. The results showed that nearly 57 percent of the Indian commercial banks are providing transactional Internet banking services. The analysis indicated that Internet banks have better operating efficiency ratios and profitability as compared to non-Internet banks. Internet banks rely more heavily on core deposits for funding than non-Internet banks. Further, the multiple regression results showed that on one hand the profitability and offering of Internet banking does not have any significant association, while on the other hand, Internet banking has a significant and negative association with the risk profile of the banks.

Lin et al. (2011), in their paper “Banking on the Internet: Does Internet Banking Really Improve Bank Performance?” explained that Internet banking represents an important innovation in the banking industry, yet its empirical analysis that how it affects the bank performance remains rare. The Authors found only modest evidence that Internet banking adoption improves bank performance. In fact, the adoption of Internet banking actually results in worse performance for many banks. The analysis further suggests that younger banks and banks that are earlier adopters are more likely to enjoy the benefits of Internet banking.

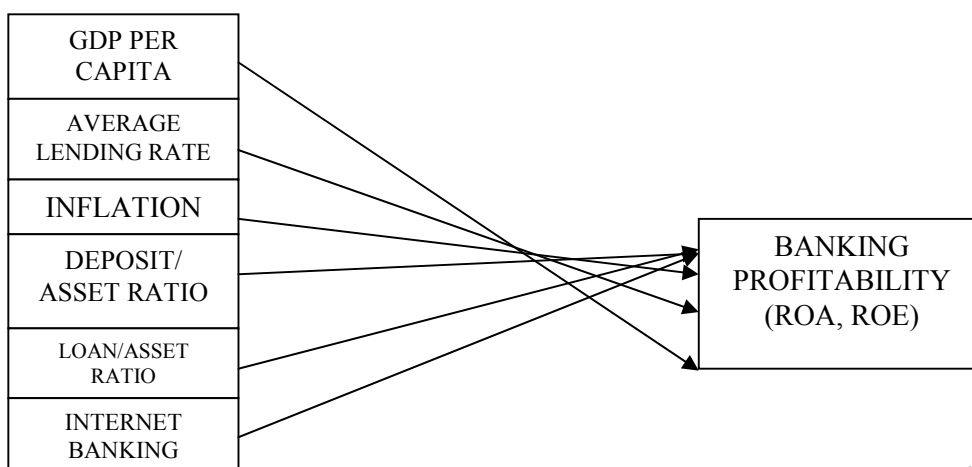
4. Research Methodology, Data and Model Specification

This study is based on secondary data. The required data have been collected from the various annual reports of RBI, Indian bank's association, annual reports of selected banks and RBI bulletins.

To analyse the effects of Internet banking on bank performance with GLS method, we have collected panel data from 8 top commercial banks in India (State Bank of India (SBI), Bank of India (BOI), Central Bank of India (CBI), Punjab National Bank (PNB), and Union Bank of India (UBI), ICICI Bank, HDFC Bank and Axis Bank.) that have adopted Internet banking sometime between 1997 and 2010. We follow an empirical model based on previous works (Berger (1995); Demirguc-Kunt and Huizinga (1999); by Quispe-Agnoli and Whisler (2006); and Oney et al (2007) where we defended a bank's performance, Y_{it} (measured by the ratio of bank's pre-tax profits to total assets ROA) or to its equity (ROE) for bank i in year t . This relationship is as follows:

$$Y_{it} = \alpha_0 + \theta_t MACRO_t + \beta_i X_{it} + \gamma_t BANKCR_t + \delta_{it} INTERNET_{it} + \varepsilon_{it}$$

Where α_0 is a bank fixed effect term that captures time-invariant influences specific to bank i , $MACRO_t$ is a matrix of macroeconomic variables in India in year t that include percentage change in real GDP per capita, inflation and the average lending rate charged by banks in year t . X_{it} is a matrix of bank-specific control variables: Total deposits in bank i as a ratio of total assets in year t , total loans of bank i as a ratio of total assets in year t . We employ a matrix of dummy variables, $INTERNET$, that are defined based on the time of adoption of a transactional website by the bank. Thus, $INTERNET$ is a dummy variable that equals 1 if the bank introduces a transactional website in year t . Model diagram of the study according to both dependent and independent variables are presented as below:



5. Data Analysis

In this section we will test the impact of Internet banking services on the profitability of banks. The unit root test has been applied in order to find the reliability and accuracy of data. . Therefore, we begin our empirical analysis by testing for unit roots of variables with the help of Fischer - Dickey Fuller test.

5.1. Unit Root Test

Table 1 shows the results of Fischer - Dickey Fuller test.

Table 1. Stationary Test of Variables

Variable	Intercept and no trend	Intercept and trend	Optimal lag
ROA	14.22 (0.94)	32.48 (0.00)	-
ROE	29.39 (0.02)	25.24 (0.06)	-
DA(Deposit/Asset)	37.92 (0.00)	24.47 (0.06)	-
LA(Loan/Asset)	9.95 (0.86)	24.19 (0.08)	-
INF(Inflation)	12.97 (0.67)	20.78 (0.18)	1
GDP	14.29 (0.08)	47.59 (0.00)	-
LR(Lending Rate)	66.39 (0.00)	-	-

As can be seen from the table, all variables are stationary except inflation. When this series is converted into first difference, this variable became stationary as its value is 1 in the fourth column. Therefore, we use this variable with one year lag in our model to estimate the impact of Internet Banking on profitability of banks.

5.2 Tests of Fixed Effects, Random Effects and Pooled OLS model

Panel data can be divided into the three types of model, the Pooled OLS, fixed effects and random effects models. Pooled OLS model has constant coefficients; referring to both intercepts and slopes therefore we could pool all of the data and run an ordinary least squares regression model. The fixed effects regression models allow the unobserved explanatory variables (either cross-section fixed effects or time fixed effects) to be correlated with the observed explanatory variables. If the unobserved explanatory variables are strictly uncorrelated with the observed explanatory variables, then it might be appropriate to treat the regression model as a random effect model, where cross-section specific constant terms (a different

constant term for each cross-section unit) are randomly distributed across cross sectional units. In Modern Econometrics “Random Effect” is considered synonymous with zero correlation between the observed explanatory variables and unobserved explanatory variables.

In terms of regression analysis, as panel data is adopted in this study, corresponded regression model should be selected from fixed effect and Pooled OLS model. In this context we have applied F-test. The results obtained from F-tests (for fixed Effects) are presented below. These results indicate that the null hypotheses that we have to use Pooled OLS methods are rejected for these groups of banks at % 5 significance level. Therefore, as it is shown by the results, we cannot estimate the model by using Pooled Ordinary Least Squares method.

The general accepted way of choosing between fixed and random effects is running a Hausman test. Statistically, fixed effects are always a reasonable thing to do with panel data (they always give consistent results) but they may not be the most efficient model to run. Random effects will give better P-values as they are a more efficient estimator.

Table 2. Results of Hausman Test (ROA and ROE)

Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
0.000000	7	1.0000

Result of Hausman test in table 2 shows that fixed effects model is more appropriate as compared to random effects model for this study. Results of F-test also are presented as below for both dependent variables:

$$F = \frac{(0.89 - 0.79)/7}{(1 - 0.89)/97} = 12.6 \quad (1)$$

$$F = \frac{(0.64 - 0.52)/7}{(1 - 0.64)/97} = 4.6 \quad (2)$$

As can be seen, the calculated F statistic for ROA model (1) is equal to 12.6 and critical value of this statistic is equal to 2.83. The calculated value of F is greater than the table value (12.6 > 2.83). Consequently, estimated model by using Pooled data model is invalid and the best model for our study is fixed effects.

The calculated F statistic for ROE model (2) as can be seen is equal to 4.6 and critical value of this statistic is equal to 2.83 ($F_{0.01}(7,97) = 2.83$). As the calculated value of F is greater than the table value (4.6 > 2.83), panel model with fixed effects is then selected as an appropriate model versus pooled data model.

Table 3. Estimation of Model of Study with Fixed Effects Model (ROA)

Variable	Coefficient	t-Statistic	Prob.
C	0.637883	2.790923	0.0063
GDP	-0.026349	-0.819485	0.4145
INF(-1)	0.053178	1.882288	0.0628
DA	0.131985	3.504815	0.0007
LA	0.262625	5.273482	0.0000
LR	-0.051911	-0.816120	0.4164
INTERNET	0.046134	2.180300	0.0317
R-square= 0.899847, Adjusted-R square=0.885392, F=62.25133, DW=2.156695			

Table 3 shows the results of the model. R square value in the above table indicates that 89 per cent of the variance in dependent variable (ROA) is explained by the model. All independent variables of the study are logarithmic. As can be seen from the table, GDP has a negative impact on dependent variable ROA. Nevertheless, it is not significant. This means that any improvement in production and economic growth will shift surplus capital into investment and production instead of banks' accounts. We can infer from this the conclusion that the reduction in banks' deposits would be followed by a fall in their profitability. The negative coefficient of GDP can be explained that countries with higher GDP are assumed to have a banking system that operates in a mature environment resulting in more competitive interest and profit margins.

Inflation (INF) variable with one year lag has a positive impact on ROA but it is insignificant. This may suggest that due to the inability of banks to accurately predict the levels of inflation, the banks lose the opportunity to benefit from inflationary environment to increase profits.

As can be seen from the table both total deposits of banks as the ratio of total assets (DA) and total loans of banks as the ratio of total assets (LA) have a positive impact on profitability of banks and both ratios are significant. Deposits and loans are the most important indicators in the bank financial statements because they reflect the banks' primary functions. Provided that other variables remain constant the higher the rate of transforming deposits into loans the higher would be the profitability of banks in India. The lending rate variable is negative but is insignificant. This result shows a decrease of interest rates in India has had a negative impact on profitability of banks.

It is also clear from the table that the dummy variable of INTERNET has positive impact on the profitability of banks at 3 per cent level of significance. This result indicates that adoption of Internet banking as a delivery channel would improve convincingly their performance and profitability. Table 4 clearly demonstrates that the dummy variable of Internet banking has also a positive impact on dependent

variable ROE and is significant. This result corroborates positive affect of Internet banking on profitability of banks in India.

Table 4. Estimation of Model of Study with Fixed Effects Model (ROE)

Variable	Coefficient	t-Statistic	Prob.
C	1.258591	2.417792	0.0175
GDP	-0.075008	-2.149195	0.4341
IINF(-1)	0.033251	0.619486	0.5370
DA	0.176240	2.847277	0.0054
LA	-0.033258	-0.600563	0.0495
LR	0.086223	0.727652	0.4686
INTERNET	0.224260	3.755754	0.0003
R-square= 0.648028, Adjusted-R square=0.597228, F=12.75646, DW=2.090003			

6. Conclusion

The methodology of carrying out this research was based on the objectives of the study and the availability of relevant information. The results of the models show both internal and external factors have a significant impact on the performance of banks in India. The findings of the study indicate that both total deposits of banks as ratio of total assets (DA) and total loans of banks as ratio of total assets (LA) have a positive impact on profitability of banks and are significant. Results of econometric models also show despite of a small share of Internet banking services in profitability of the banking system as compared to the traditional activities of banks this service has a positive impact and enhanced productivity and profitability of the banking system in India.

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Services Strategy and Hotels Performance: Evidence from Mures County

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Abstract: Tourism is one of the components that has experienced the highest rising both nationally and internationally. Within this field of activity, the hotel industry is one of the most representative and dynamic elements, generated by the relation with environment through the products and services that they supply. Therefore, the main objective of this research is to emphasize and analyze the relation between the dimension of performance indicators and the services strategy of hotels in Mures County (Romania). With this purpose in view, we mention that we have carried-out a quantitative research, through a number of 42 questionnaires managed by hotel managers and data gathering period occurred in June-September 2012. The results emphasize a partial confirmation of the tested hypotheses, complementing the results of research carried-out internationally. The research conclusions are important theoretically and empirically, they complement the professional literature and provide the managers a frame that results in raising economic performances and implicitly increase of competitiveness.

Keywords: hotel industry; Mures County; quantitative research; services strategy

JEL Classification: L80; L83; L10; C10.

1. Introduction

The credible significance provided to the tourism by researchers nowadays, both nationally and internationally, fortified with statistical data supplied by international organizations in the field reveals the significance of the research theme.

In the course of time, tourism services have become the key element of destination attractiveness therefore a distinct attention has been given to the units supplying tourism services and factors that can influence competitiveness of these units. As a matter of fact, the existence of a strong competitive environment brings thorough changes within tourism units and their managers in order to search for the best

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strategies that will enable them to get or to sustain a competitive advantage on the market. (Avci, Madanoglu et al, 2011, p. 147)

Strategy implementation is critical for the success of hotels (Hrebiniak, 2009, p. 12), and strategic orientation relates to the manner in which a firm succeeds to adapt to its external competitive environment (Avci, Madanoglu et al, 2011, p.148, according to Miles & Snow, 1978; Mintzberg, 1973). As a rule, researchers use strategic orientation in order to investigate the relation between the strategy of a firm and its performance (Avci, Madanoglu et al, 2011, p.148, according to Dess, Newport et al, 1993), as well as the relation between perception of managers concerning importance of competitive strategies and dimension of hotels (Petzer, Steyn et al., 2008).

From these considerations, we would like to mention that the purpose of this research is to provide the hotel managers the opportunity to develop competitive strategies specific to the hotel industry. To this effect, we mention the research goal that consists of analysing the connection between the services strategy of hotels and performance indicators through a quantitative research carried-out in Mures County. We also mention that this study is part of an empirical research that is focused on quality management, customer orientation, human resources management and information technology in the hotels in Mures County.

2. Literature Review

In order to cope with the existing competition on the tourist services market, tourist units have tried to develop and implement strategies. How important is in the life of a firm, and not only, the existence of a strategy, can be quantified through losses occurred and by means of the price paid when it lacks (Sasu & Coita, 2006, p.961).

At present the main trends governing the strategic orientation of hotel units are as follows:

- diversification, with direct influence on increasing economic efficiency (Andrei, Copețchi et al., 2006, p. 19). Diversification assumes "inveigling of new markets, adding new versions to the current line of products, that provides multiple advantages in various fields (technological, strategically, qualitative, marketing etc.)" (Pantelescu, 2009, p. 123). The professional literature has not agreed on the diversification concept applied in tourism services, however, it is admitted that it is associated with innovation but also relates to provide differentiation by creating something novel (Moraru, 2011, p. 128).
- development of new services, that generate the following effects (Menor, Tatikonda et al, 2002, p. 135): improvement of profitability concerning the existing offer, inveigling of new customers, maintaining loyalty of existing customers

(crucial in the hotel industry) and opening of new desirable markets. Griffin and Page (1996) state that, as usual, hotel managers evaluate the efforts assumed by the development of some new services or products, by measuring financial indicators (for instance: income, profit or profit margin) as well as by measuring other quantifiable indicators such sales volume and market share (Menor, Tatikonda et al, 2002, p. 141).

- outsourcing, representing (Espino-Rodríguez & Rodríguez-Díaz, 2008, p. 213) the solution for many hotels that want to supply the same quality services, but reduce significantly from the budgets dedicated to some segments of activity. Outsourcing is also called "management of facilities", representing a strategy through which hotels provide major functionalities to some external suppliers specialized in certain services (Cojocariu, 2010, p. 78). The research in the field mentions that (Song, 2008, p.80) outsourcing will certainly become the main trend in developing the international hotel industry, being increasingly included in the strategy it adopts (Espino-Rodríguez & Padron-Robaina, 2005). Therefore, a study carried-out in Spain (Canary Island) on a 50-hotel sample (Espino-Rodríguez & Padron-Robaina, 2005) has emphasized that application of the outsourcing strategy is carried-out for those activities that are not effective or do not generate value, in fact those that do not represent the source of getting a competitive advantage;
- loyalty of customers, being at present a highly special element in the hotel industry. Loyalty of customers is not possible without the supply of services at a high level, and much more than that, in order to get and maintain loyal customers, the personnel-customer contact should take place beyond official requirements, that improve the value of supplied service;
- cooperation, that represents (Pantelescu, 2009, p. 115) an effective means to develop and diversify commercial exchanges, and cooperation relations generate stability in relations among tourism operators. The cooperation ways in the hotel industry are multiple (association, integration etc.) and assume cooperation relations with various service suppliers, through which hotels provide unique and customized services and products, without additional costs provided to some go-betweens (external suppliers of tourist services) (Pantelescu, 2009);
- development of the new information technologies, that drives major changes in the structure of world economy. It is also important to mention the fact that the new information technologies (Global Distribution System, Customer Relationship Management etc.) have revolutionized the hotel industry, and have generated the development of some positive and interactive relations with customers, in order to achieve the objectives of hotels (Wu & Lu, 2012, p. 277).

3. Research Hypotheses

Therefore, we consider that these modern orientations considerably contribute to get the competitive advantage and profitability increase. In order to sustain this statement we mention that in the course of time, researchers have emphasized the existence of a strong intensity relation between the services strategy and the economic performances of activity in hotels (Dickson & Ginter, 1987; Avci, Madanoglu et al, 2011; Petzer, Steyn et al., 2008; Espino-Rodriguez & Padron-Robaina, 2005).

Under these circumstances, we considered important to define the following research hypotheses:

H₁: Dimension of performance indicators of hotels is not associated with managers' perception in relation to the services strategy;

H₂: Dimension of performance indicators of hotels is correlated with managers' perception in relation to the services strategy.

4. Research Methodology

The research method of the data gathering study is the investigation, and the working tool is the questionnaire. The surveyed population consists of 42 hotels located in Mures County, and respondents data have been taken from the report entitled the "List of tourist reception structures with classified accommodation functions" presented by the Ministry of Regional Development and Tourism in Romania. The surveyed population is small-sized therefore the study has been carried-out by means of full observation. Data gathering period was in June - September 2012.

Data gathering requires the use of a measuring scale, nominal, ordinal scale, interval scale or ratio scale, respectively. Within our research, we have used the ordinal scale and interval scale. Therefore, in order to measure the importance of services strategy, respondents have been asked to describe the importance extent of attributes, using a Likert scale for it, from 1 (not important) to 5 (very important). In order to measure the performance of hotels included in the study, respondents have been asked to mention the efficiency indicators, using the interval scale (from very small–below 20%, to very big–over 80%) and to indicate the value of income and expenditures for 2011, also using the interval scale (from Lei 0.5 million, to over Lei 15 million). Indicators shown within the study are general indicators used in the evaluation of performance (Laitinen, 2002), respectively: profit for each category of activity, market share, occupancy rate of accommodation, income value and expenditure value.

Statistical methods used in the analysis and interpretation of data are:

- χ^2 bivariate association test, non-parametric significance test;
- **Pearson correlation coefficient**, in order to measure the intensity of a linear relation between two quantitative variables (Novak, 2004, p. 127).

Elements studied within research are the following:

- strategic orientation of hotels by means of the following variables: In the periods when occupancy is lower, some tips and incentives are provided; We develop unique and original services that are in line with international standards; Diversification of services is compulsory for customer inveigling; Supply of services takes place at a higher level compared to competition; We supply exclusive services to the segments of high-income customers; We provide a significant attention to the segments of loyal customers; Improvement of services takes place considering customer specifications; Outsourcing takes place for some services; Cooperation relations are in progress with various partners; New technologies are used in order to provide added value to offer services and New services are permanently introduced compared to the existing ones;
- performance of activity concerning hotels included in the study by means of the indicators: Occupancy rate; Profit for accommodation services; Profit for alimentary services; Profit for other services; Market share; Income volume and Expenditure volume.

5. Research Results

In order to test the first hypothesis - *Dimension of performance indicators of hotels is not associated with managers' perception in relation to the services strategy* - we have checked the relation between services strategy and performance indicators of the studied hotels, using the χ^2 test for it. According to table 1, results are the following:

- indicator entitled *Occupancy rate* significantly distinguishes hotels in the study for the following variables describing the services strategy: *diversification of services is compulsory for customer inveigling; supply of service takes place at a higher level than competition; we supply exclusive services to the segments of high-income customers; we provide a significant attention to loyal customers; improvement of services takes place considering customer specifications; outsourcing of some services takes place; cooperation relations are in progress with various partners; new technologies are used in order to provide added value to services and new services are permanently introduced compared to the existing ones;*

- indicator entitled *profit for accommodation services* significantly distinguishes hotels in the study for the following variables describing the services strategy: *in the periods when occupancy is lower, some tips and incentives are provided; supply of services takes place at a higher level compared to competition; we provide a significant attention to segments of loyal customers; outsourcing takes place for some services; cooperation relations are in progress with various partners; new technologies are used in order to provide added value to offer services and new services are permanently introduced compared to the existing ones;*
- indicator entitled *profit for alimentary services* significantly distinguishes hotels in the study for the following variables focused on services strategy: *in the periods when occupancy is lower, some tips and incentives are provided; improvement of services takes place considering customer specifications and outsourcing takes place for some services;*
- indicator entitled *profit for other services* significantly distinguishes hotels in the study for the following variables: *in the periods when occupancy is lower, some tips and incentives are provided; we supply exclusive services to the segments of high-income customers; we provide a significant attention to the segments of loyal customers; improvement of services takes place considering customer specifications; outsourcing takes place for some services; cooperation relations are in progress with various partners; new technologies are used in order to provide added value to services and new services are permanently introduced compared to the existing ones;*
- indicator entitled *Market share* significantly distinguishes hotels in the study for the following variables: *in the periods when occupancy is lower, some tips and incentives are provided; improvement of services takes place considering customer specifications and outsourcing takes place for some services;*
- indicator entitled *Income* significantly distinguishes hotels in the study for the following variables related to the services strategy: *we supply exclusive services to the segments of high-income customers; we provide a significant attention to the segments of loyal customers; cooperation relations are in progress with various partners; new technologies are used in order to provide added value to services and new services are permanently introduced compared to the existing ones;*
- indicator entitled *Expenditures* significantly distinguishes hotels in the study for the following variables focused on the services strategy: *diversification of services is compulsory for customer inveigling; we provide a significant attention to the segments of loyal customers; new technologies are used in order to provide added value to services and new services are permanently introduced compared to the existing ones.*

In conclusion, except one variable (*We develop unique and original services that are in line with international standards*), all the other variables that mirror the services strategy contribute to economic performance of hotels, reflected by means of indicators taken into consideration. Therefore, the first hypothesis is invalidated.

Table 1. Results of the χ^2 test in order to check the relation between performance indicators of hotels and services strategy

There are no statistically significant differences according to performance indicators of hotels in relation to the services strategy defined by variables:		Occupancy rate	Profit for accommodation services	Profit for alimentary services	Profit for other services	Market share	Income	Expenditure
In the periods when occupancy is lower, some tips and incentives are provided	χ^2 calculated	8.333 ^a	13.603 ^a	12.150 ^a	17.784 ^a	13.502 ^a	17.854 ^a	18.783 ^a
	Freedom degrees (Fd)	6	6	6	8	8	14	14
	Significance	.215	.034	.059	.023	.096	.214	.173
	χ^2 theoretical	-	7,84	5,34	9,04	2,73	-	-
	Conclusion		Overruled					
We develop unique and original services that are in line with standards	χ^2 calculated	4.667 ^a	8.240 ^a	8.696 ^a	8.840 ^a	11.219 ^a	9.227 ^a	15.549 ^a
	Fd	6	6	6	8	8	14	14
	Significance	.587	.221	.191	.356	.190	.816	.342
	χ^2 theoretical	-	-	-	-	-	-	-
	Conclusion							
Diversification of services is compulsory for customer inveigling	χ^2 calculated	13.607 ^a	6.081 ^a	5.894 ^a	5.976 ^a	7.769 ^a	20.328 ^a	25.790 ^a
	Fd	6	6	6	8	8	14	14
	Significance	.034	.414	.435	.650	.456	.120	.028
	χ^2 theoretical	7,84	-	-	-	-	-	17,12
	Conclusion	Overruled						Overruled
Supply of services takes place at a higher level compared to competition	χ^2 calculated	14.101 ^a	12.258 ^a	7.678 ^a	9.458 ^a	7.299 ^a	13.111 ^a	15.585 ^a
	Fd	6	6	6	8	8	14	14
	Significance	.029	.056	.263	.305	.505	.518	.339
	χ^2 theoretical	7,84	5,34	-	-	-	-	-
	Conclusion	Overruled						
We supply exclusive services to segments of high-income customers	χ^2 calculated	21.584 ^a	16.881 ^a	11.100 ^a	29.470 ^a	14.501 ^a	42.730 ^a	47.267 ^a
	Fd	12	12	12	16	16	28	28
	Significance	.042	.154	.520	.021	.561	.037	.013
	χ^2 theoretical	11,34	-	-	19,37	-	32,62	37,92
	Conclusion	Overruled			Overruled		Overruled	
We provide a significant attention to	χ^2 calculated	27.074 ^a	24.805 ^a	8.531 ^a	45.287 ^a	12.043 ^a	53.625 ^a	57.375 ^a
	Fd	9	9	9	12	12	21	21

segments of loyal customers	Significance	.001	.003	.482	.000	.442	.000	.000
	χ^2 theoretical	21,67	21,67	-	26,22	-	46,80	46,80
	Conclusion	Overruled			Overruled		Overruled	
Improvement of services takes place considering customer specifications	χ^2 calculated	20.341 ^a	13.889 ^a	21.151 ^a	22.944 ^a	22.528 ^a	24.983 ^a	20.460 ^a
	Fd	9	9	9	12	12	21	21
	Significance	.016	.126	.012	.028	.032	.248	.492
	χ^2 theoretical	14,68	-	14,68	14,85	14,85	-	-
	Conclusion	Overruled			Overruled			
Outsourcing takes place for some services	χ^2 calculated	25.010 ^a	31.540 ^a	25.842 ^a	25.622 ^a	26.415 ^a	30.840 ^a	35.204 ^a
	Fd	12	12	12	16	16	28	28
	Significance	.015	.002	.011	.060	.048	.324	.164
	χ^2 theoretical	26,22	26,22	26,22	26,30	15,33	-	-
	Conclusion	Overruled						
Cooperation relations are in progress with various partners	χ^2 calculated	17.992 ^a	16.875 ^a	13.500 ^a	25.035 ^a	9.645 ^a	31.253 ^a	25.217 ^a
	Fd	9	9	9	12	12	21	21
	Significance	.035	.051	.141	.015	.647	.070	.238
	χ^2 theoretical	11,39	8,34	-	26,22	-	29,61	-
New technologies are used in order to provide added value to offer services	Conclusion	Overruled			Overruled		Overruled	
	χ^2 calculated	28.641 ^a	26.870 ^a	12.427 ^a	47.949 ^a	12.267 ^a	54.576 ^a	58.917 ^a
	Fd	9	9	9	12	12	21	21
	Significance	.001	.001	.190	.000	.424	.000	.000
	χ^2 theoretical	21,67	21,67	-	26,22	-	46,80	46,80
New services are permanently introduced compared to the existing ones	Conclusion	Overruled			Overruled		Overruled	
	χ^2 calculated	32.241 ^a	28.107 ^a	6.250 ^a	49.414 ^a	13.183 ^a	59.477 ^a	56.349 ^a
	Fd	12	12	12	16	16	28	28
	Significance	.001	.005	.903	.000	.659	.000	.001
	χ^2 theoretical	26,22	26,22	-	32,00	-	48,28	48,28
Conclusion	Overruled			Overruled		Overruled		

In order to test the second hypothesis (using Pearson correlation coefficient) - *Dimension of performance indicators of hotels is correlated with managers' perception in relation to the services strategy* - results related to the correlation analysis between performance indicators of hotels and perception of managers in relation to the services strategy are shown in table 2. To this effect, we emphasize the following aspects:

- With validity $p < 0,01$, the variables showing average intensity correlations with performance indicators are:
 - *Diversification of services is compulsory for customer inveigling with the indicators: Income (0,439) and Expenditures (0,483);*

-
- *Supply of services takes place at a higher level compared to competition* with the indicator entitled *Occupancy rate* (0,482);
 - *We supply exclusive services to the segments of high-income customers* with the indicators entitled *Occupancy rate* (0,525), *Profit for accommodation services* (0,448), *Market share* (0,450), *Income* (0,550) and *Expenditures* (0,530);
 - *Improvement of services takes place considering customer specifications* with the indicators: *Occupancy rate* (0,427), *Profit for accommodation services* (0,427), *Profit for alimentary services* (0,461), *Profit for other services* (0,426) and *Market share* (0,403);
 - *Outsourcing takes place for some services* with indicator entitled *Profit for other services* (0,443);
 - *New technologies are used in order to provide added value to offer services* with the indicator *Occupancy rate* (0,401).
- With validity $p < 0,05$, the variables showing low to average intensity correlations with performance indicators are:
 - *Diversification of services is compulsory for customer inveigling* with the indicator entitled *Occupancy rate* (0,377);
 - *Supply of services takes place at a higher level compared to competition* with the indicators: *Profit for accommodation services* (0,374), *Profit for alimentary services* (0,321), *Profit for other services* (0,384), *Income* (0,336) and *Expenditures* (0,356);
 - *We supply exclusive services to the segments of high-income customers* with the indicators: *Profit for alimentary services* (0,372) and *Profit for other services* (0,380);
 - *We provide a significant attention to the segments of loyal customers* with the indicators: *Occupancy rate* (0,351) and *Profit for accommodation services* (0,309);
 - *Improvement of services takes place considering customer specifications* with the indicators: *Income* (0,376) and *Expenditures* (0,383);
 - *Outsourcing takes place for some services* with the indicators: *Occupancy rate* (0,311), *Profit for accommodation services* (0,339), *Profit for alimentary services* (0,311), *Market share* (0,376), *Income* (0,312) and *Expenditures* (0,353);
 - *Cooperation relations are in progress with various partners* with the indicators: *Occupancy rate* (0,356) and *Profit for other services* (0,390);
 - *New technologies are used in order to provide added value to offer services* with the indicators: *Profit for accommodation services*

(0,373), Profit for alimentary services (0,316), Profit for other services (0,389) and Income (0,353);

- New services are permanently introduced compared to the existing ones with the indicators: Occupancy rate (0,318), Profit for accommodation services (0,318), Profit for other services (0,338), Income (0,372) and Expenditures (0,312).

In conclusion, some variables have not registered statistically significant correlations with performance indicators (for instance, the variables: *in the periods when occupancy is lower, some tips and incentives are provided; we develop unique and original services that are in line with international standards*), and the other variables defining services strategy have only registered average values of correlation coefficients, but statistically significant for the study. Therefore, the second hypothesis is partly validated.

Table 2. Results of Pearson correlation analysis between performance indicators of hotels and services strategy

<i>VARIABLES</i>		Occupancy rate	Profit for accommodation services	Profit for alimentary services	Profit for other services	Market share	Income	Expenditures
In the periods when occupancy is lower, some tips and incentives are provided	Correlation coefficient	-.136	-.182	-.182	-.051	-.120	-.279	-.300
	Significance	.391	.249	.249	.750	.449	.073	.053
	N	42	42	42	42	42	42	42
We develop unique and original services that are in line with international standards	Correlation coefficient	.242	.189	-.021	.145	.137	.159	.166
	Significance	.123	.230	.894	.360	.386	.313	.294
	N	42	42	42	42	42	42	42
Diversification of services is compulsory for customer inveigling	Correlation coefficient	.377*	.229	.180	.204	.232	.439**	.483**
	Significance	.014	.145	.255	.196	.140	.004	.001
	N	42	42	42	42	42	42	42

Supply of services takes place at a higher level compared to competition	Correlation coefficient	.482**	.374*	.321*	.384*	.280	.336*	.356*
	Significance	.001	.015	.038	.012	.072	.030	.021
	N	42	42	42	42	42	42	42
We supply exclusive services to segments of high-income customers	Correlation coefficient	.525**	.448**	.372*	.380*	.450**	.550**	.530**
	Significance	.000	.003	.015	.013	.003	.000	.000
	N	42	42	42	42	42	42	42
We provide a significant attention to the segments of loyal customers	Correlation coefficient	.351*	.309*	.183	.267	.220	.276	.252
	Significance	.023	.046	.247	.087	.161	.077	.108
	N	42	42	42	42	42	42	42
Improvement of services takes place considering customer specifications	Correlation coefficient	.427**	.427**	.461**	.426**	.403**	.376*	.383*
	Significance	.005	.005	.002	.005	.008	.014	.012
	N	42	42	42	42	42	42	42
Outsourcing takes place for some services	Correlation coefficient	.311*	.339*	.311*	.443**	.376*	.312*	.353*
	Significance	.045	.028	.045	.003	.014	.044	.022
	N	42	42	42	42	42	42	42
Cooperation relations are in progress with various partners	Correlation coefficient	.356*	.265	.265	.390*	.226	.171	.128
	Significance	.021	.090	.090	.011	.149	.278	.417
	N	42	42	42	42	42	42	42
New technologies are used in order to provide added value to offer services	Correlation coefficient	.401**	.373*	.316*	.389*	.280	.353*	.302
	Significance	.008	.015	.041	.011	.072	.022	.052
	N	42	42	42	42	42	42	42
New services are permanently introduced compared to the existing ones	Correlation coefficient	.318*	.318*	.120	.338*	.197	.372*	.312*
	Significance	.040	.040	.450	.028	.212	.015	.044
	N	42	42	42	42	42	42	42

** Significant correlation at 0,01level

* Significant correlation at 0,05level

6. Conclusions

The results of analysis carried-out have emphasized average and low intensity relations between the variables that comprised the services strategy and performance indicators of activity concerning hotels included in the study, as well as statistically significant associations among most variables included in the study. From these considerations, we consider it is important to enunciate the following proposals focused on strengthening the services strategy in hotels in order to increase economic performance:

- development of unique and original services that are in line with international standards;
- significant attention provided to customers so that they become loyal;
- diversification of offer for customer inveigling;
- implementation of outsourcing.

These elements will contribute to the creation of a valuable picture, for customer inveigling and acquiring recognition in the hotel industry. In order to sustain this side, we would like to mention that empirical studies in this field (Dickson & Ginter, 1987; Avci, Madanoglu et al., 2011; Petzer, Steyn et al., 2008; Espino-Rodriguez & Padron-Robaina, 2005) have proved strong intensity relations between the implementation of a suitable strategy in hotels and performance.

Under these circumstances, we also have to mention the study limits that are oriented to the following directions:

- Taking into account the dynamic framework of the research field, the study can be improved. Therefore, we consider there are also other elements focused on the strategic orientation of hotels;
- Although the study is an exploratory one, through full observation, the surveyed population is small sized (42 hotels) therefore its representativeness and generalization within a geographical region or nationally, should be considered and analyzed carefully.

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Multilateral Development Banks and Their Role in Supporting European SMEs during the Current Financial Crisis

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Abstract: The impact of the ongoing financial crisis on the availability of finance to small and medium-sized enterprises (SMEs) represents an important topic nowadays. The access to finance for SMEs is a major barrier for their growth, especially during severe conditions such as the global financial crisis. Financing the SMEs represents a priority for the most of the multilateral development banks. The aim of the paper is to analyze the activity of European multilateral development banks - European Investment Bank Group and European Bank for Reconstruction and Development - in the support of SMEs. We found that SMEs financing increased during the period 2008-2011 and the international financial institutions took several measures in order to improve the SMEs access to finance.

Keywords: multilateral development banks; small and medium-sized enterprises (SMEs); firms' financing; financial crisis; financial constraint

JEL Classification: G32; F34

1. Introduction

One of the priorities of Multilateral Development Banks (MDBs) is to support small and medium-sized businesses by facilitating access to finance and by offering advisory services. In attaining this goal, MDBs cooperate with a wide range of financial intermediaries, such as commercial banks, leasing and guarantee companies, micro-credit providers, and private equity funds.

The aim of the paper is to analyse the activity of Multilateral Development Banks in the support of European SMEs after the onset of financial crisis. We have chosen to analyse only the activity of the most important MDBs from Europe – European Investment Bank (EIB) Group and European Bank for Reconstruction and Development (EBRD). Other regional development banks, such as Black Sea Trade and Development Bank (BSTDB), have an insignificant impact on the activity of SMEs.

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These two MDBs have a long history and experience in support for micro, small and medium-sized enterprises (MSMEs) in their countries of operations. The MBDs have recognized the importance of supporting SMEs as they are important providers of entrepreneurship, innovation, and job creation.

2. The Importance of SMEs for the European Economies

In the financial literature, the term “Small and medium-sized enterprise” (SME) is defined differently from one country to another and across financial institutions. The European Union (EU) defines SMEs as enterprises with less than 250 employees and with a turnover smaller than EUR 50 million, and/ or an annual balance sheet total not exceeding EUR 43 million (European Commission, 2003).

The importance of SMEs for the economic development is well recognized in the literature (Onofrei & Anton, 2010, pp. 26-27). SMEs represent an important source of job creation, economic growth, entrepreneurship and innovation, competitiveness, dynamism and flexibility in advanced industrialized countries, as well as in emerging and developing economies.

SMEs represent the dominant form of business organization, accounting for over 95% and up to 99% of enterprises, depending on the country (OECD, 2006, p. 1). In the European Union, nearly 98% of all enterprises are SMEs, while 92.2% of them are micro enterprises (Ecorys, 2012, p.15). For 2012, the SMEs account for approximately 67% of total employment. In economic terms, SMEs generate around 58% of the gross value added to the European economy. Small businesses are very important for stimulating innovation, which contributes to enhancing the competitive of the economy and to the creation of new jobs. For these reasons, small and medium-sized enterprises are considered to be the backbone of EU economy.

3. Access to Finance as a Constraint on SMEs

Even if SMEs play an outstanding role for the European economies, they face significant difficulties in finding the appropriate source of finance. Many studies (Vos et al., 2007, pp. 2648–2672; Beck et al., 2008, pp. 467–487) found that SMEs face higher financial constraints as large firms and the lack of external financing represents a barrier in their development. Financing constraints can be defined as „the inability of a company to obtain a sufficient amount of financing to fund its investment needs at current, or even higher, interest rates” (Antão et al., 2007, p. 35). As a response to these financial constraints, many multilateral development banks and governments initiated programs to foster SME financing including

government subsidized lines of credit, public guarantee funds, (public) venture capital funds, and other public SME support schemes.

Financial constraints can be measured using surveys or econometric analyses. For the euro zone area, the European Central Bank (ECB) and the European Commission (EC) are conducting biannual surveys on the access to finance of SMEs in the European Union (SAFE). According to the latest ECB's "survey, covering the period April to September 2012, access to finance is still the second most pressing problem for euro area SMEs, after the "finding customers" concern (European Central Bank, 2012). We noticed significant differences across countries and industries regarding the importance of "access to finance" concern. In some countries – Italy, Portugal, and the Netherlands – the concern has reached the highest level since 2009.

Despite that many private financial institutions have entered into SMEs financing market segment and have built institutional capacity for on-lending to small borrowers, SMEs continue to experience a lack of access to credit. SMEs show a far more volatile pattern of growth and earnings, with greater fluctuations, than larger companies. At the same time, their survival rate is lower than for larger companies. For these reasons, banks are reluctant to finance SMEs relative to larger and more established firms. Furthermore, commercial banks and other traditional sources of credit may consider that SMEs are riskier than larger companies, and respond by asking for higher interest rates. In these conditions it is difficult for SMEs to borrow from banks than for bigger companies. This fact has been exacerbated after the onset of current economic and financial crisis, when many financial intermediaries have restricted their lending to SMEs in response to pressures on their balance sheets.

4. The Role of Multilateral Development Banks in Supporting SMEs

Since the onset of current economic and financial crisis, MDBs took several measures in order to enhance SMEs access to finance. Firstly, MDBs increased the cooperation among them in order to support private sector development in those countries affected by the ongoing financial crisis. At the beginning of 2009, three important MDBs - the European Investment Bank Group (EIB Group), the European Bank for Reconstruction and Development (EBRD) and the World Bank Group - have agreed on a Joint IFI Action Plan undertook to provide up to EUR 24.5bn in support of lending to the real economy through private banking groups in Central and Eastern Europe, in particular in favour of SMEs. In December 2012, the same MDBs signed a new joint IFI Action Plan for economic growth and recovery in Central and South Eastern Europe. Once again, the above-mentioned international financial institutions committed EUR 30 billion for the period 2013-

2014 in order to finance private and public sector initiatives, including infrastructure, corporate investment and the financial sector.

Secondly, MDBs expanded their cooperation with financial intermediaries in order to reach the greatest number of SMEs and magnify the presence and scale of local/regional financial institutions.

Thirdly, almost all the important MDBs have increased the level of commitment to the supporting of SMEs after the crisis. As a response to the current financial crisis, in 2009 the EIB has increased the overall volume of its SME lending in the European Union by 76% compared with 2008; financing more than 50,000 new SMEs (see table no.1). Intermediated loans via local or regional commercial banks represent the EIB's core instrument, with EUR 40.20 billion signed during the period 2008-2011 (European Investment Bank, 2013). More than two hundred thousand SMEs in the European Union have benefited from EUR 45,681million during the period 2008-2011.

Table 1. EIB Lending Targeting SMEs in Member States 2008-2011 (EUR Million)

	2008	2009	2010	2011	Total 2008-2011
Approvals	8,589	15,126	10,978	10,988	45,681
Signatures	8,192	12,628	9,972	9,492	40,285
Disbursements	5,623	10,042	10,010	10,027	35,702
Allocations	6,980	7,072	9,987	12,718	36,757
Numbers of SME allocations - EU27	50,043	48,373	63,424	64,495	226,335

Source: European Investment Bank, www.eib.org

The European Investment Fund (EIF) is the European Investment Bank (EIB) Group's specialist provider of risk financing to the benefit of SMEs across Europe (European Investment Fund, 2013). Through financial intermediaries (commercial banks, guarantee and leasing companies, micro-credit providers, and private equity funds) EIF delivers three types of instruments for SMEs: equity instruments, guarantee and credit enhancement instruments, as well as microfinance.

Table 2. EIF Funding for SMEs in Europe 2009-2012 (EUR Billions)

	2009	2010	2011	2012	Total 2009- 2012
Commitment					
Private equity	0.7	0.9	1.1	1.4	4.1
Guarantees & microfinance	0.2	0.6	1.5	1.2	3.5
Total	0.9	1.5	2.6	2.6	7.6
Leverage					

Private equity	3.1	4.6	6.1	7	20.8
Guarantees & microfinance	2.2	3.2	7.6	5.2	18.2
Total	5.3	7.8	13.7	12.2	39

Source: European Investment Fund, www.eif.org

During the period 2008-2012 EIF made equity commitments of EUR 4.1 billion which catalyzed over EUR 20 billion from other investors (see table no. 2). EIF played a critical role in stimulating the development of private equity market in Europe as a provider of funds and, in the same time, as a manager of some venture capital funds. EIF also committed EUR 3.5 billion into guarantees and securitisation transactions, stimulating new loan portfolios for SMEs worth EUR 18.2 billion.

By enhancing the access to financing for SMEs, the EIB Group aims to improve employment opportunities, to stimulate innovation, and to accelerate growth and reduce poverty.

The EBRD support to SMEs comprises loans, equity, guarantees, microfinance, and trade financing. Credit lines to local or regional banks and to leasing companies represent the EBRD's core instrument to support small businesses (European Bank for Reconstruction and Development, 2013).

Relative to EIB's activity in support to SMEs, EBRD covers only SMEs from CEE and CIS countries and the value of financial commitment is much lower. One common feature for both MDBs is the sharp increase in the number of financed projects and in the value of financial commitment (see table no. 3). At the end of 2011, EBRD had SME projects in 25 countries, involving over 130 financial intermediaries. Furthermore, EBRD offers technical assistance (advisory services) through its Small Business Support unit.

Table 3. EBRD Credit Lines Targeting SMEs in Member States 2008-2011 (EUR Million)

	2008	2009	2010	2011	Total
Number of projects	28	36	49	49	162
Credit lines value	257	753	761	547	2,318
Number of countries	15	15	17	18	-

Source: European Bank for Reconstruction and Development, www.ebrd.com

Another finding of our study is that multilateral development banks made efforts to broaden the range of their products in order to meet the SMEs financing needs. In the last five years, EIB and EBRD have introduced new instruments and facilities in order to improve SMEs access to finance. EIB Group, the most important MDB in terms of financial commitment to the SMEs in the European Union, has

launched several new products in the last years, the most important being Progress Microfinance (March 2010) and Risk Sharing Instrument (December 2011).

Progress Microfinance (European Progress Microfinance Facility) aims to increase the availability of finance in form of micro-loans (up to € 25,000) for certain vulnerable groups (ethnic minorities or female entrepreneurs) for starting or developing a microenterprise (with less than 10 employees).

Within the *Risk Sharing Finance Facility*, EC (DG Research and Innovation), EIF, and EIB introduced a new instrument (*Risk Sharing Instrument*) aimed to enhance the access to debt financing for innovative SMEs and small mid-caps (companies with fewer than 500 employees) undertaking Research & Development and innovation projects. EIF offers direct financial guarantees covering principal and interest loss to selected financial intermediaries, which are making loans and financial leases to research-based SMEs. Financial intermediaries are transferring the benefit of the guarantee (reduced interest rate) to the entrepreneurs.

5. Conclusions

Addressing the SMEs' financial gap represents one of the priority objectives of the multilateral development banks. MDBs provide financial products to SMEs that lack sufficient access to private sources of capital. Analyzing the activity of MDS after the onset of current financial and economic crisis we found that the financial commitments to the SMEs have grown significantly during the period 2008-2012. Consequently, the number of SMEs financed by local financial intermediaries has increased significantly. All multilateral development banks made efforts to broaden the range of its distribution channels and products. Currently, MDBs deliver a mix of financial instruments, including debt, equity, guarantees, local currency loans, and political risk insurance. During the period 2008-2012, MDBs have been deepening their partnerships to enhance the impact of funds allocated to the SMEs and to support economic recovery in the EU.

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Macroeconomics and Monetary Economics

Debt Burden in Romanian Economy

Gina Ioan¹

Abstract: The paper treats the debt burden in Romanian economy. The rigidity of the structure of public spending has not allowed rapid adjustment to respond to massive reduction of production and income, reflected in excessive budget deficits and public debt doubled in a few years. The paper concludes that public debt which is poorly structured, it is an important factor in macroeconomic instability and also in propagating economic crises.

Keywords: debt; crisis; Romanian economy; production; income

JEL Classification: H63; H68

1. Debt Burden in Romanian Economy

The international economic crisis effects that have been felt also among emerging countries in Europe have stopped positive growth and the nominal and real convergence process to which they have committed.

In Romania, the reduce of capital flows and the accumulated imbalances have worsened in recent years, being an important factor of vulnerability to macroeconomic stability reflected in excessive widening budget deficit and a corresponding increase in public debt.

During 2000-2011, Romania's public debt showed a continuing increase, accelerating the pace of 2007, when it increased by almost 30% since 2006.

The increasing in time of the public debt was accompanied by a significant increase in government spending, well above the economy's capacity to fund, inevitably leading to worsening economic conditions in the long term.

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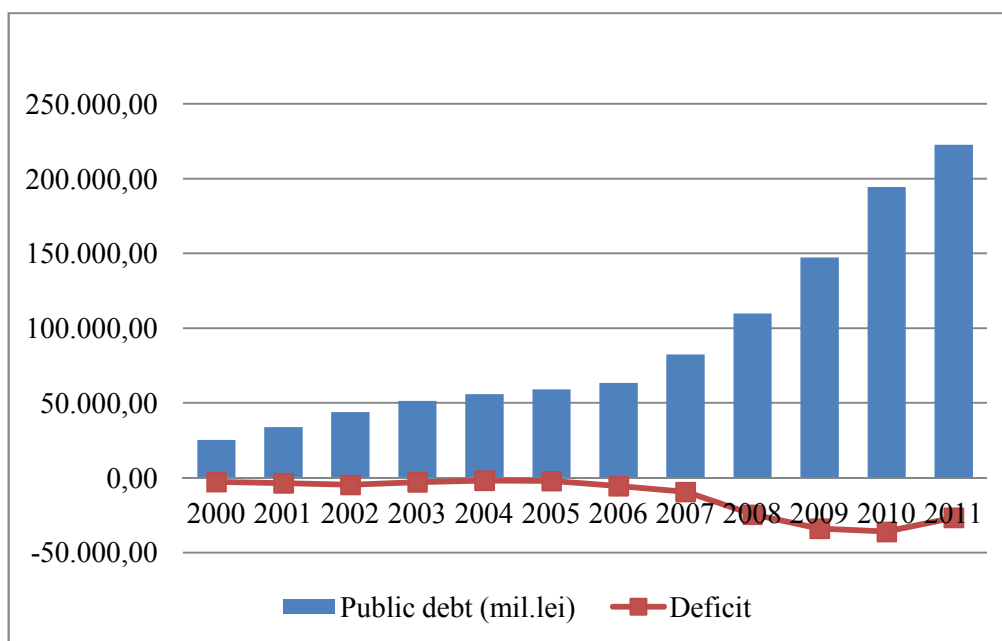


Figure 1. The evolution of public debt and budget deficit during 2000-2011 (mil. lei)

Source: INSSE

In 2007-2009, public debt increased considerably in most countries affected later by the economic crisis. Even countries that have not experienced drastic decreases in economic activity occurred in this period an increase in debt of about 20% in real terms as a result of safety measures to prevent a stronger shock (Reinhart & Rogoff, 2010).

Although the ratio of public debt/ GDP is below 60%, while accumulating involved and involves considerable risks for macroeconomic stability. Accelerating the pace of debt generated on the one hand a sensitive repayment capacity gradually with decreasing national income and, on the other hand, an increase in interest rates.

At the onset of the economic crisis, the Romanian state as debtor was suddenly deemed insolvent and when the probability of default increased, the external funding decreased, resulting in lower aggregate demand (consumption and investment), increasing unemployment rates, decreased production. In other words increasing nominal debt increases real volatility, financial fragility and reduces average growth (Cecchetti, Mohanty, & Fabrizio, 2011).

Debt or the opportunity cost of public goods funded by it becomes a burden on the economic development. For Romania, this opportunity cost is the private investment given up in favor of public goods.

A public debt even higher than that of Romania, can be regarded as a positive influencing factor in strengthening the real economy if deficits are used for investments with higher return than the cost of financing and not for consumption or social and labor contributions.

Given that GDP grows faster than interest and fees on loans, the state would not have to resort to raising taxes by transferring the burden of debt on future generations. How in Romania have turned to new loans or to others rolling for interest payments, this is only a postponement of the problem, experience showing that the effects will be seen on fiscal policy (Barro, 1979, pp. 940-971).

During 2000-2011, the share of government debt to GDP while remaining below the threshold specified by the Maastricht Treaty, increased solvency risk because the average growth rate of government debt was 21% per year and the average rate of growth was about 4%.

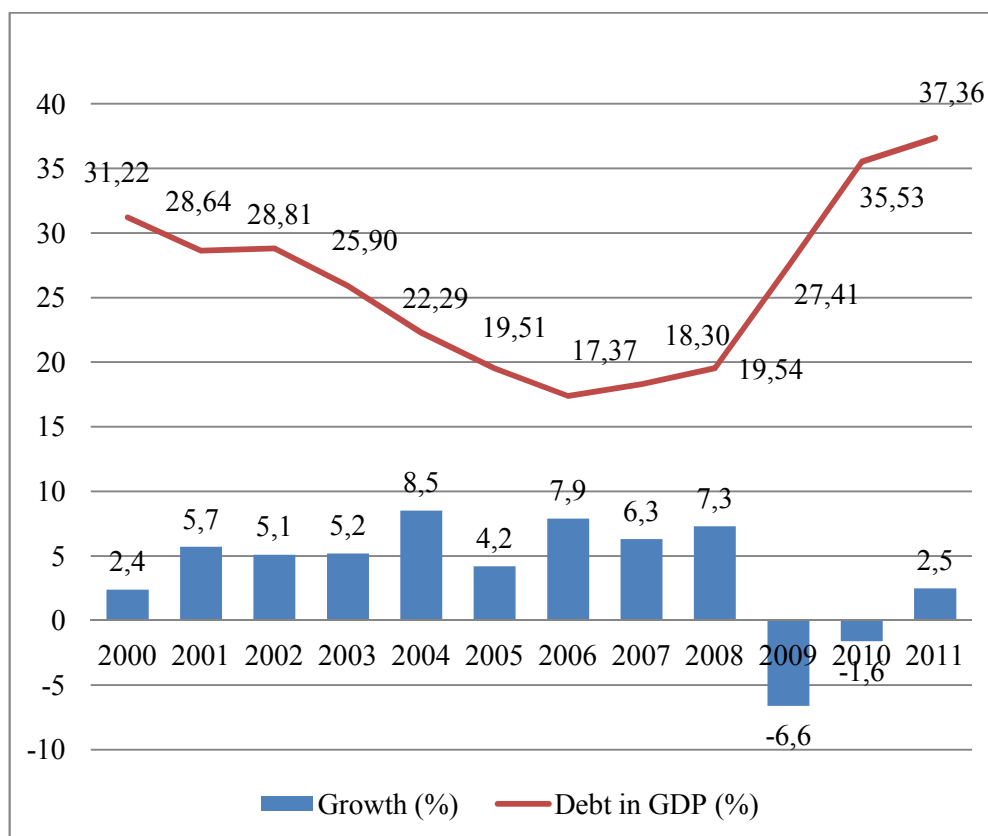


Figure 2. Debt in GDP and growth (%) in Romania between 2000-2011

Source: NBR, INSSE

In the 10 years analyzed in this economic research, foreign government debt ratio of total government debt outpaced domestic government debt ratio till 2006. Since 2007, relations have changed due to the fact that the state turned to a greater extent on domestic creditors. Unsustainability of debt is reflected largely by external borrowing wrong destination. In Romania, compared to European countries, a low share of foreign debt was allocated funding effective investment, generating jobs leading to increased production and sustainable economic progress. Without these investments became very difficult to create sources to finance the budget deficit and public debt service coverage. The lowest level of external borrowing for investment projects funding occurred in 2009 (53.5% of total external debt) when financing deficit increased costs due to tensions and instability in international markets.

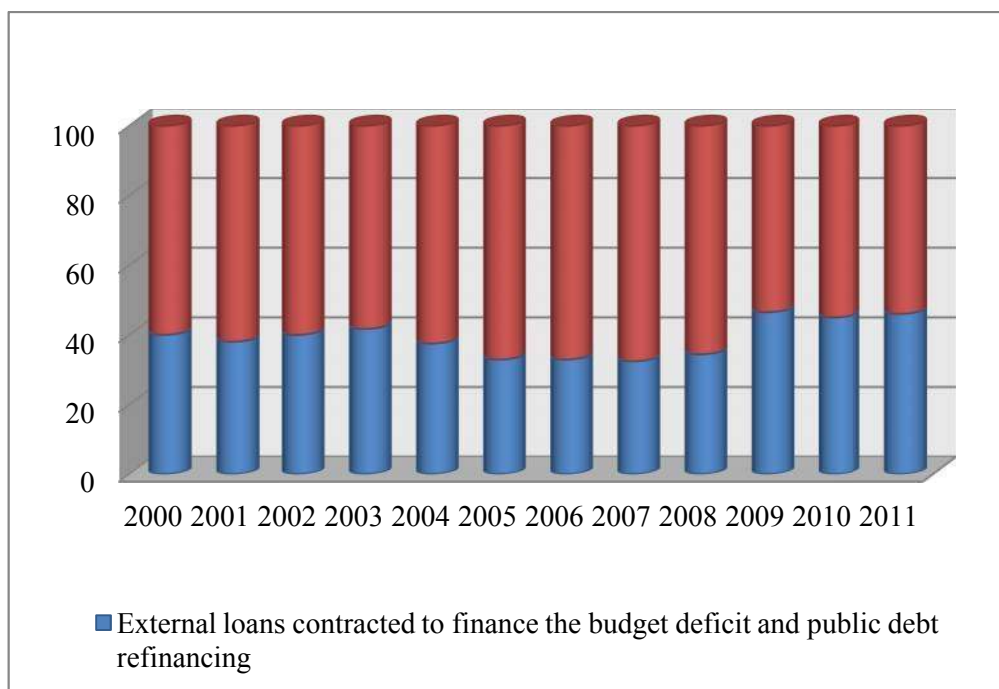


Figure 3. Destination of foreign loans during 2000-2011 (% of total external loans)

Source: Ministry of Finance, NBR, the Court of Auditors

The indebtedness to foreign country and foreign effort made are below:

Table 1. Main Indicators of External Debt

Year Indicator	Coverage of imports by reserves (months imports)	MLT external debt ratio of external debt to GDP	Share in total exports MLT	External debt service ratio MLT
2000	3.3	26.9	84.4	20
2001	3.9	29.4	87.3	21.4
2002	4.7	33	93.1	18.8
2003	4.2	33.4	84.2	17.6
2004	5.2	30.1	83	18.4
2005	6.3	30.8	93.2	20.1
2006	6.4	28.5	90.8	19.5
2007	6	31.2	102.1	21.8
2008	5.7	37.1	119.6	29.3
2009	8.5	56.5	181.9	33.1
2010	8.6	59.4	165.6	33.3
2011	7.5	55.4	144.3	28.3

Source: NBR

The coverage of imports by reserves (months imports) calculated as the ratio of international reserves (foreign exchange and gold) and average monthly imports of goods and services (imports listed in the future) is an indicator showing foreign reserves capacity to finance economic activities in conditions of low liquidity and solvency. For international reserves represent a shock absorber in this case, the value of this indicator should not be more than 3-4 months.

The share of external debt in GDP on medium and long term is a relative indicator that shows how much of the added value achieved by Romania would be required to repay foreign debt. From the data above, we see that since 2009, foreign indebtedness increased significantly, more than half of the newly created being burdened by external debt.

The share of the foreign debt on medium and long term in total exports is an important indicator that expresses indirect financial effect of indebtedness to the rest of the world. As with the previous indicator, it increased also significantly since 2009, which means that we need many more annual exports for contracted debt repayment and interest on outstanding loans. How much this index increases the effect of external debt influences the purchasing power of the country's exports.

The share of the foreign debt on medium and long term is the ratio of external debt to exports of goods and services and represents the share of debt service (repayment of principal repayments and payments and interest payments and commissions) in total foreign exchange inflows from exports. Currency depreciation since 2009 has increased this indicator by almost 13% with 2008. The

effect of the increase of this ratio is, on the one hand, an increase in prices of intermediate inputs and capital goods imported without a significant improvement in the ability to import (import compression) resulting in a contraction of aggregate supply and investment. On the other hand, rising prices of intermediate and capital goods imports may lead to a greater demand for unskilled workers if the labor market skilled labor and unskilled are net substitutes (Tiruneh, 2004).

At a level above 20% of this indicator, it increases the financial burden of repayment of external debt.

2. Conclusions

From the above, we see that the rigidity of the structure of public spending, has not allowed rapid adjustment to respond to massive reduction of production and income, reflected in excessive budget deficits and public debt doubled in a few years.

Also, we can conclude that public debt (domestic and external) which is poorly structured, whether we refer to the purpose for which it was contracted, or interest rate, currency denomination, or in terms of maturity, is an important factor in macroeconomic instability and also in propagating economic crises.

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A Descriptive Assessment of the Effects of Lehman Brothers' Shock on the External Equilibrium in Some Euro Area Countries

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Abstract: The purpose of this article is the assessment of the way in which the propagation of the Lehman-Brothers shock has been reflected on the developments in the balance of payments of some countries in the euro area and the highlighting of the asymmetries, which have emerged due to the generated effects. The motivation is represented by the importance of the asymmetries manifestation within a monetary area, by the effects they have on the implementation of the common policies, and by their causes: are these asymmetries generated by asymmetric macroeconomic shocks or by the accumulation in time of some vulnerable elements in the economy? The paper is a capitalization of the research project "External equilibrium and asymmetric shocks" elaborated in 2012, at "Victor Slăvescu" Centre for Financial and Monetary Research of "Costin C. Kirițescu" Institute for Economic Research, Romanian Academy.

Keywords: asymmetric shock; balance of payments; economic vulnerability; financial crisis

JEL Classification: F15, F36, F41, G01

1. Introduction

At the level of a currency area, the asymmetric shocks issue is important as far as it can lead to imbalances within this area that can cause disagreements and tensions between member states. In a most general model, a monetary area should be "built" so that the process of unification to potentiate its ability to manage the shocks that propagate inside it and to restore the overall balance after any disturbance caused by a shock or by a complex combination of shocks. On the other hand, a monetary

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area should provide to its component economies the support to develop in social-economic terms and also to become and to remain internationally competitive.

In the authors' view, the macroeconomic shock is that impulse generated by an event (a political, economic, social, etc. decision or conflict) with major impact on the economic system by producing in time and space some disturbances of the economic activity (Milea et al., 2012). The effects involved by such a shock are a matter of perspective varied over time, because there is a time lag between the event and the manifestation of the shock through the generated effects. In addition to the propagation of major events, exogenous to the environment analyzed, there is the possibility of endogenous "breaches", due to the environment dependency on certain vulnerable elements that determine "harmful" accumulations in the environment. For example, the economic and financial crises may be caused by "exogenous" shocks or may be the result of the accumulations over time of factors (anomalies) that have the potential to "burst". Usually, the "burst" is a natural way of correcting imbalances created and accumulated in time.

In the second section of the article, there are briefly presented the main views on the importance of asymmetric shocks in generating macroeconomic imbalances within a monetary area. In the third part, the research methodology is described and in the fourth part, it is made an analysis of the effects produced on the balance of payments of the considered countries, taking as reference the Lehman Brothers shock. The article summarizes, in the conclusions section, the main ideas, which are emerging from the research.

2. Literature Review on the Importance of Asymmetric Shocks in Generating Economic Imbalances

As pointed out in other papers (Criste, 2009; 2012), an asymmetric macroeconomic shock is a shock that propagates differently, being relevant only when there are analyzed comparatively several areas or variables of the same type and between which there are transmission channels created based on the development of economic relations. For a currency area, the domains that are compared in terms of shock asymmetry are the Member States, considering that between them there are already strong and consolidated economic and political relations.

The literature on currency areas points out that the incidence of asymmetric macroeconomic shocks in the member countries is a fundamental criterion for evaluating its operation. There are well-known the works of Mundell (1961; 2002), McKinnon (1963) and Kenen (1969), who founded the theory of optimum currency areas and who have considered that an important cause for producing macroeconomic imbalances within a currency area could be the propagation of asymmetric shocks, which are more difficult to manage under a single monetary

policy. Mundell (2002) points out that all shocks are considered asymmetric if they affect countries differently and Méliitz (1991) argues that even in circumstances of common or similar shocks, countries may need different policies' reactions because of the lack of synchronization of the economic cycle or because of structural differences.

On the other hand, Zemanek, Belke, Schnabl (2009) note that, at the euro area level, the imbalances did not emerge suddenly after a shock, but had rather gradually accumulated as a consequence of persistent asymmetric wage policies. Chen, Milesi-Ferretti and Tressel (2012) have another view. They consider that at the basis of the accumulation of imbalances in the euro area there is the production in time of three major macroeconomic shocks that have occurred asymmetrically in the analyzed countries - in Germany on the one hand and in the countries of the periphery, on the other hand.

It should however be noted that, in time, through the process of globalization, it has been created a support for the transmission of macroeconomic shocks. Globalization increases the spread of risks in the market, especially if production systems, information networks and social communities (social and economic activity, in general) are vulnerable. Other trends that increase the vulnerability to shocks with global propagation refer to the manifestation of herd behavior, especially in the financial markets; to the increase of income disparity (polarization of society); to the increase of general uncertainty about future political, social and economic developments. Uncertainty hampers and affects the ability to predict, prevent and mitigate the negative effects of shocks.

These findings reinforce the idea that the strengthening of relationships and interdependencies at global level increases the risk of spreading the high amplitude macroeconomic shocks and the regional differences contribute to their asymmetric manifestation.

In our opinion, we believe that macroeconomic imbalances within a currency area, namely the euro area, can accumulate over time, being "encouraged" by the use of a single currency, but also the propagation of asymmetric macroeconomic shocks inside a monetary area maintains and exacerbates political disagreements, while the management tools of such shocks are neither sufficient nor effective.

3. The Research Methodology

The euro area and the European Union countries in general represent an important source of research and of numerous empirical analyses, particularly for the propagation of asymmetric macroeconomic shocks, consisting of countries with economies characterized by a variety of structural, financial and institutional elements (Milea et al., 2012).

In general, a shock propagated asymmetrically in a currency area can be problematic because it creates a risk of a rupture between the member countries, if the national visions regarding the management of the crisis caused by the shock are divergent. Such a phenomenon may represent itself a new shock, that of the dissolution of the currency area or perhaps worse, the deepening of that crisis.

In order to assess the significance of the effects of the macroeconomic shocks propagated in the euro area, we have considered a common macroeconomic shock – the shock of Lehman Brothers's bankruptcy – and we have analyzed comparatively the macroeconomic developments of the balances of payments in some countries of the euro area. In order to reveal asymmetries between countries we have selected countries with different characteristics and different evolutions over time, on the one hand, Germany and on the other hand, Spain, Greece, Portugal.

The comparative analysis is done not only considering the geographical space, between countries, but also in time, before the bankruptcy of Lehman Brothers, in 2008, and after its occurrence.

4. An Assessment of the Lehman Brothers Shock Effects on the External Balance of Some Euro Area Countries

The sovereign debt crisis in the euro area arises from the bankruptcy shock of the Lehman Brothers financial institution, in September 2008, originally propagated through the channel of interbank market, then going toward the financial markets and finally reaching the real economy. The amplification of the distrust of the investors has been sent also in the European Union emerging countries. At this shock, firms and households have responded, among others, by postponing investments and spending. The main features of this period are the increasingly larger concerns of the governments on the recession issue and on the deterioration of global financial stability due to the increase of the risk aversion and the diminishing of the international liquidity.

In general, this shock has led to increased uncertainty causing a qualitative distinction made by investors, by treating differently the debts of the euro area countries, reorienting from the countries with spectacular economic growth (Ireland, Spain and Portugal) toward those who, although they have had slower growth trajectories, have enjoyed a long time macroeconomic stability and an institutional maturity (Germany). Thus, investors have quickly changed preferences regarding risky assets; the demand for low-risk instruments has increased significantly, although the yields on these securities are lower. In search of investment opportunities with low risk in the euro area, the capital migrated to the government securities - considered the safest - especially to the government

securities and bank deposits in Germany (Criste, 2012). Such a reaction has deepened the existing differences between countries, and in this respect, the considered macroeconomic shock is an asymmetrical one. Also, investors' behaviour, with consequences in the direction of lowering FDI (foreign direct investments) inflows in the risky countries, has had an impact on adjusting current account deficits (given that FDI is an important source of external deficit coverage). Thus, the countries that have relied on foreign direct investments have suffered a drastic adjustment of the current account deficits as a result of the uncertainty shock.

The vulnerable elements of each country have played an important role in the transmission of macroeconomic shocks and thus in the emergence of the sovereign debt crisis. This results from regional differences, the shocks affecting negatively, in a direct way, those countries that have followed a pattern of unsustainable growth. We refer to those countries which have developed either on speculative bubbles (Ireland, Spain and Portugal) or on excessive government spending, ignoring or "permitting" the unsustainable development of the budgetary balance (Greece).

Following the evolution of the current account balances in the analyzed countries, even prior to the bankruptcy of Lehman Brothers, there was a persistent asymmetry in time, as Chen R., Milesi-Ferretti și Tressel (2012) remarked. They believe that at the basis of this asymmetry, which may be found also in other countries of the euro area (generally, between the countries of the periphery and the core area of this monetary union), there is the occurrence over time of three major macroeconomic shocks.

Thus, a shock is the "tsunami" of Asian economies, especially of China, which was represented by their economic boom in the '80s and '90s of the twentieth century. Such a shock manifested over time, but very amply, has generated a change in the global trade balance, by the replacement of the goods exported from European countries with Asian goods, much cheaper. However, at the level of the euro area, this shock has manifested asymmetrically by the fact that, on the one hand, it has encouraged the export activity of Germany, specialized on equipment and machineries necessary to the export branches of the Asian economies and on the other hand, it has affected the export activity of the European Union's periphery countries, whose competitiveness has deteriorated.

Another shock that affected asymmetrically the trade balances of the euro area countries is the shock of rising oil prices (in three main stages, from 1973 to 2008), which has deteriorated the trade balance of the oil-importing countries. However, the countries specialized in the production and export of goods required by oil producers, such as Germany, have continued to benefit from this activity.

The opening of Central and Eastern European countries to the developed countries, especially once it has been accepted the idea of their integration into the European Union structures (the late '90s) represents the third shock. Such an event was manifested by significant FDI flows from Germany and from the exporting capital countries toward these emerging countries. As a result, Germany has enjoyed higher capital efficiency and lower labor costs specific to these economies. In this context, we can say that the shock of Lehman Brothers has occurred onto an already asymmetrical background (see Figure 1).

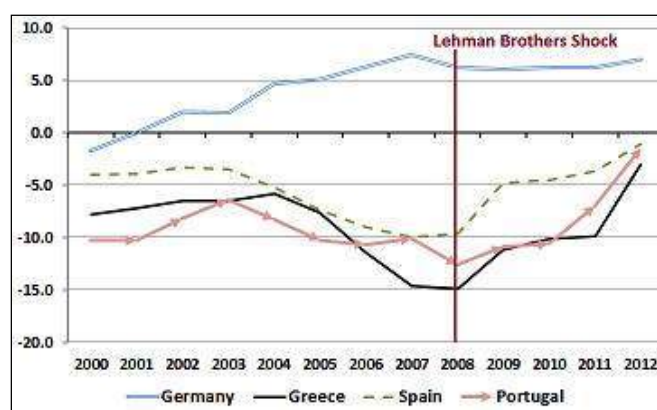


Figure 1. Current Account Developments in Several Euro Area Countries, 2000-2012 (% GDP)

Source: Eurostat Data

The striking asymmetry between the evolution of the current account balance of Germany and of the current account balances of Spain, Portugal or Greece is based on structural factors, but also on functional factors, from the political, economic, social, behavioral and cultural spheres. Thus, in Spain, Portugal or Greece, growth has been based on final consumption and on construction investment projects, which has resulted in a significant increase in imports, which has led to the deterioration of the current account balance. On the opposite side there is Germany, with a trend of stagnation of private consumption and with an export-led growth, as reflected by the surplus in the trade balance, which is a relevant component of the current account of the German balance of payments.

Theoretically, the current account deficit, which is covered by the export-oriented greenfield foreign direct investments, does not create problems in the longer term, while current account deficits that are not accompanied by an increase in investments in the tradable sector would generate a permanent increase in the foreign debt, with undesirable consequences on the medium and long term. Such a phenomenon has occurred in “vulnerable” countries, thus foreign investments mainly being made in the non-tradable sector.

Greece is the only peripheral country in which the investments attracted are close to zero. Hence, the need for capital, unfulfilled by domestic savings, has been covered by external loans. In Greece, the deficit of the incomes account is very large. Spain and Portugal have also large deficits of the incomes accounts, but they have attracted more investments. The deficit of the incomes account of Greece is almost entirely explained by the interest rate payments on the external loans contracted.

Generally, the Lehman Brothers shock has deepened the economic divergences among countries and has exacerbated the vulnerabilities of each country, which has created problems or even imbalances. Thus, Greece, Spain and Portugal have fiscal difficulties, and accumulated current account deficits amplified by the excessive private debts and by the low competitiveness of their economies. Such developments have been stimulated by the protection offered by the euro currency, because the euro project has generated false expectations related to the lower risk of the investments in the monetary area. Investors' expectations were formed on the basis of a period of low macroeconomic volatility (the so-called "Great Moderation"), not taking into account the possibility that an event (a macroeconomic shock) could determine the inability of the Euro Area countries to refinance their own debts. Therefore, they have not made any difference regarding long-term bonds issued by Euro Area governments. This behaviour has generated a specific resource allocation in terms of excessive capital inflows that fuelled strongly the growth based on consumption causing overheating of the economies of Spain, Portugal and Greece. Instead, by the early 2000s, Germany implemented a competitive deflationary policy encouraging export activity.

The relationship, at the economy's level, between the current account of the balance of payments, the government budget balance and the private sector budget balance (aggregated data) shows that the consolidated general budget balance may be an important factor for influencing the current account of the balance of payments. Thus, if the deleveraging of the public sector is not equaled by the net savings (positive) of the private sector, then the difference will be reflected in the current account of the balance of payments as a deficit.

In the period of the transmission of the Lehman Brothers shock (since 2009), the current account deficits adjustments in Spain, Portugal and Greece have been achieved by a quick and visible change in trajectory of the private sector budget, while their public budget deficits have increased significantly during this period, compared with the level before the onset of the financial crisis.

The adjustment of the aggregate private budget does not mean that the private sector savings have increased, but it is rather a reflection of the reduced expenditures and investments in this sector, an idea that is reinforced by the

developments of the households' net savings (an important component of the private sector), as a percentage of the disposable income.

The chart below shows that the Lehman Brothers shock spread into the euro area has asymmetrically affected the households' savings. Thus, the net saving for Greece dropped dramatically (as a share of households' disposable income), while in Germany it has remained consistent and positive (see Figure 2).

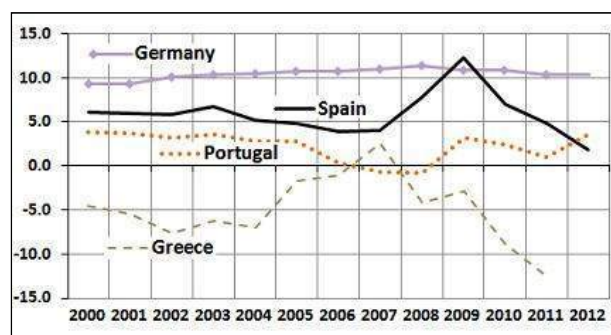


Figure 2. Net Savings of the Households in the Analyzed Countries (% of Disposable Income); Non-Available Data for Greece in 2012

Source: Ameco Data

In Greece, the net savings have been negative, since 2000, with an improvement tendency until 2007. After 2007 (the crisis outbreak) the households net savings have deteriorated even more, with the exception of a short period of time (the second half of 2008, until early 2009) when there was a shortly spurt of this indicator. This evolution can be interpreted as the effect of saving behavior for precautionary purposes. Since 2009, the net savings of households resume more dramatically its decreasing.

The period after 2008 is characterized by a noticeable deterioration of the general government balance, due to the action of the automatic fiscal stabilizers. These developments are a general reflection of the conditions engendered by the global financial and economic crisis, and they are not caused just by a particular shock, that of the Lehman Brothers collapse.

The deterioration of the public finances in Greece has been fuelled both by the excessive government spending and by an insufficient tax collection. In contrast, in Spain, which had a "healthy" fiscal position, recording a significantly budget surplus before the outbreak of the global economic and financial crisis, observing the budget deficit rules could not prevent the economic collapse. This situation is explained by the accumulation of a significant debt by the private sector, debt which has been encouraged by the market conditions created due to the country's accession to the euro area (lower interest rates have stimulated consumption and

unproductive investment). The economic crisis has highlighted not only the weaknesses of each economy, but also that an unsustainable economic growth in the long term, based on the strong growth of the real estate and construction, has led to an increase in adverse shock in those countries.

Between 2000 and 2008, Germany's public debt has grown relatively modestly, but with a sharp and relatively consistent increase in 2009, reaching 74, 5% of GDP, according to Eurostat data. In the other surveyed countries public debt has also increased dramatically after the emergence of Lehman Brothers shock, but only Greece has experienced a nearly exponential growth of this indicator, between 2009 and 2011, marking an acceleration of indebtedness amid growing difficulties to tackle the general economic situation and the previously accumulated debts.

The “snowball” effect on public gross debt is an indicator that reflects very clear the asymmetry between the two types of countries chosen, as it refers to the phenomenon of government debt accumulation by increasing expenditures with interest payments, costs that are financed by issuing additional debt. The uncertainty shock, propagated in the financial market, affects the financial relationship of government authorities with other countries, by suddenly increases of interest rates of government bonds of the countries considered risky. They are no longer attractive, as they store a higher risk, so that their price decreases, resulting in the manifestation of risk aversion. Therefore, interest rates paid on the public external loans will increase, adversely affecting the external equilibrium. This excessive indebtedness has negative effects on the productive activity, on the economic development and also on the foreign debt burden. Additionally, obtaining foreign loans becomes more difficult in terms of the constraints imposed by creditors. The graphic that describes the “snowball” effect shows a widening of the disparities, particularly between Germany and Greece, after 2008 (see Figure 3).

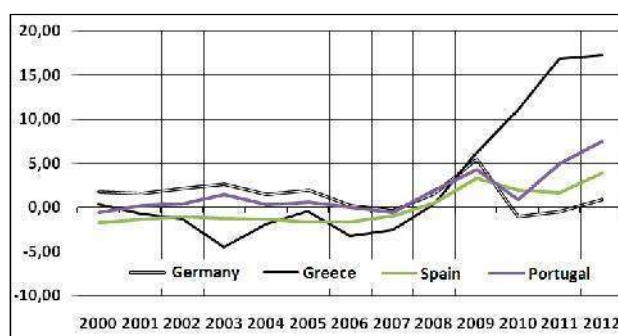


Figure 3. “Snowball” Effect on the Consolidated Gross Public Debt (% GDP at Market Prices)

Source: Ameco Data, according to Excessive Deficit Procedure, Based on ESA 1995

The adjustment of the current account deficit in the surveyed countries depends on the economic structure of each economy. A strongly negative economic situation, as in the Greek case, despite the transient improvement of the current account deficit, cannot support the achievement of an external equilibrium on a sustainable base. Loans from the IMF and the European Commission can contribute to the rebuilding of the Greek economy, and thus to the achievement of the budgetary and external balances of the country, provided that the funds received will be used efficiently, directing them towards productive activities and investments in sectors of tradable goods, and with the purpose of supporting the development of national sectors, those in which Greece has competitive and comparative advantages.

5. Conclusion

In general, an asymmetric shock propagated in a currency area can be problematic since it generates the risk of rupture between countries, if the national visions on the management of the crisis caused by the shock are divergent. Such a phenomenon may represent a new shock itself, that of the currency area dissolution or perhaps worse, that of the crisis worsening and becoming chronic.

At the current account level, the Lehman Brothers shock has developed indirectly through a plurality of chain effects, which initially have caused a significant increase in budget deficits in the context of spectacular indebtedness due to increased state needs to cover "black holes" in the economy, followed by a reduction in budget deficits and net saving in 2011, due to restoring general confidence in the recovery capacity of the economies analyzed. Greece, however, represents a distinct chapter. Thus, despite the current account adjustment following the Lehman Brothers shock effects, the general economic situation reveals a budget deficit still spectacular compared to other euro area countries, an explosive growth of public debt, weak net savings in a continuous deterioration, an uncertain political, social and economic situation. All these vulnerabilities can be a signal for generating of a new asymmetric shock - the shock of the country's default.

The current account of the balance of payments has the same asymmetry tendency already existing even before 2007, as a result of the external shocks, in terms of financing the deficits in the countries of the periphery by the core of the euro area. This allowed the persistence of imbalances in these countries and the asymmetry between Germany on the one hand and Spain, Portugal and Greece, on the other hand. Due to the uncertainty shock, there was some correction of the current account deficit for the Eurozone periphery countries.

The evolution of the current account balance only highlights the situations of imbalances existing in the economy. This indicator should not prevent us from

considering other economic parameters that can point out more accurately the significant problems existing in the economy or those problems between economies, if we realize a global analysis at the Euro Area level or at the European Union level.

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The Current Global Financial Crisis 2008-2012

Albulena Shala¹, Besnik Livoreka², Vlora Berisha³, Safet Merovci⁴

Abstract: The current global financial crisis is considered as one of the biggest crises after the crisis of the years of 30's. The global financial crisis has affected all countries including developed and developing ones. It also has affected all the industries. Population with the low-income faced the greatest consequences. The last hope for the survival of the market economy was to undertake important steps for the nationalization of bankrupted banks and companies, thereby developing policies for the preservation of jobs. Through this analysis, we have included briefly some of the development followed the period of 2008 and onwards. A summary of statistics for some important economic indicators such as employment, exporting and importing is covered in this study as well.

Keywords: market economy; bankruptcy; companies

JEL Classification: G01

1. Introduction

We are in a severe financial crisis, the heaviest so far after the Great Depression. The financial crises have become a threat to the societies, which forced the governments to approve ever-increasing expenditures. The process reached the peak during the current financial crisis, which is so deeply rooted that even the unprecedented interventions by governments affected so far is unable to stop it.

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The crisis began in the year of 2007 when the real estate prices went up in the sky. This was spread out rapidly, firstly in the entire financial sector in USA, and then in the other financial markets outside of USA.

Damages in the United States include the entire banking industry, the biggest insurance companies, savings and lenders. This was not limited only in the financial sector; however, the companies that often rely on the loans have suffered huge losses.

The U.S. car industry, which was declared a federal bailout found itself on the edge of abyss. Even, more alarmingly, banks, believing that no one turns loans back, simply stop lending without which most businesses do not function. The stock prices fell worldwide, and by the end of the year of 2008, a deep recession has captured a large part of the globe.

Paper begins with the financial crisis 2008-2012. It also includes a detailed impact of the crisis on the unemployment, export, import and the foreign direct investments. This paper ends with some conclusions on the lessons learnt of the data we have researched from literature and internet.

2. Current Global Financial Crisis (2008-2012)

The year 2008 will be remembered as the year that was described with a financial crisis that appears once in a century. The crisis caused unprecedented fluctuations in Wall Street. It also knelt the banking system and shocked the stock markets. However, this brought radical government interventions.

The first signs of the economic crisis emerged in the august of 2007. However, the 2008 was the year of real financial crisis that brought the economies of United States of America, Europe and Japan in recession for the first time after the World War II.

In 2008, among other things, Wall Street knelt down under the burden of major losses from loans which triggered the collapse of oil prices. The year of 2008 will be remembered for the unprecedented radical measures by the authorities in an effort to mitigate the crisis. The words such as collapse credit and fiscal incentives have become part of everyday vocabulary.

The crisis had much deeper roots. Many people have borrowed money to purchase houses without the opportunity to pay back their obligations. When many of them failed, lenders began to collapse. Banks showed major losses in the insurance system related to home loans. This made banks reluctant to give loans to business and other banks. The difficulties that were created made to feel the wind of recession.

In March of 2008, the first “victims failed”. “Bear Stearns' shares had a market value of about \$ 3.5 billion. However, the market value of its shares accounted for \$ 20 billion back in 2007. The confidence crisis that affected the firm prompted customers to leave. In turn, this situation put the “Bear Streams” in a horrible choice: either to sell the firm at any price to a big bank willing to assume its obligations or file for bankruptcy. As a result, its stock price fell to \$ 2 per share.

In March 2008, “Bear Streams”, one of the biggest firm in the Wall Street was purchased by its rival Morgan Chase for a small part of its value¹.

The biggest credit company named “IndyMac” failed in July of 2008². In the same month, the oil price reached \$ 147 per barrel, and the euro dollar exchange rate was \$ 1.60. The Federal Government took under its control the “IndyMac” bank on Friday, the 12th of July 2008. This was considered the second biggest bank failure in the history of U.S.A.³

In September of 2008, “Lehman Brothers” was the other major institution that went bankrupt. “Lehman Brothers” had a simple origin. Tracing back its roots, we find a small general store that was founded by German immigrant called Henry Lehman in Montgomery, Alabama in 1844. “Lehman Brothers” was established in 1850 by Henry Lehman and his brothers Emanuel and Mayer.⁴

Having a total asset value of \$ 639 billion and a debt value \$ 619 billion, the bankruptcy of “Lehman Brothers” was the biggest in the U.S. history. Its wealth had exceeded those of previous bankrupt giants such as WorldCom and Enron. Lehman Brothers was the fourth largest investment bank in U.S. in the time of its collapse. It employed a total number of 25,000 employees worldwide. The bankruptcy of Lehman Brothers made it the biggest victim of the financial crisis in U.S.⁵. The Lehman Brothers’ bankruptcy was declared in 15th of September 2008.

The next day, USA Treasury announced an emergency plan worth of billion dollars to rescue the insurance giant American International Group (AIG). AIG was an international insurance company that offered services to clients in more than 130 countries.⁶ The collapse of other banks that led to the peak of the crisis made the

¹ Sidel, Robin; Berman, Dennis K. & Kelly, Kate (2008). *J. P. Morgan Buys Bear in Fire Sale, As Fed Widens Credit to Avert Crisis, March 17*;

<http://online.wsj.com/article/SB120569598608739825.html>.

² Clifford, Catherine & Isidore, Chris (2008). *The Fall of IndyMac, July 13*;

<http://online.wsj.com/article/SB120569598608739825.html>.

³ Kristof, Kathy M. & Chang, Andrea (2008). *Federal Regulators Seize Crippled IndyMac Bank, July 12*; <http://articles.latimes.com/2008/jul/12/business/fi-indymac12>.

⁴ Burimi. *History of Lehman Brothers*. Harvard Business School;

<http://www.library.hbs.edu/hc/lehman/history.html>.

⁵ *The 2007-08 Financial Crisis in Review (The Collapse of Lehman Brothers)*; <http://www.investopedia.com/articles/economics/09/lehman-brothers-collapse.asp>.

⁶Burimi. *American International Group*; http://www.aig.com/about-us_3171_437773.html.

Government to create the rescue plan to buy the bad debt in order to stabilize the situation. According to the well-known financier, George Soros, as reflected in the interview with Financial Times: “this occurred because the crisis triggered reactions array in the financial system, which brought the financial system to “cardiac arrest”.¹ This implies that except that the crisis was so powerful that it was a kind of “virus” that was transferred from one company to another.

By the end of September, crisis passed over Atlantic. By this time, the Europe treated the crisis as being only America’s concern. In Great Britain began the nationalization of two lenders: Bradford and Bingley. Both institutions were created in 1851.² After the collapse of the Lehman Brothers’ bank and many others in Great Britain, in the mid of September of 2008, the “Fortis” group was the first major European insurance company that failed in the European continent as a result of the financial crisis. “Fortis” had worldwide activities and it was one of the five leading financial institutions in EU. Until then, “Fortis” had been a success story of a successive merger of banks and insurance companies.³

The most dramatic situation was in Iceland, where the banking system collapsed and rescue was requested by the International Monetary Fund. The crisis began to be felt more in the Russian markets. The list of countries that required assistance from the IMF besides Iceland was by joined Hungary, Latvia, Ukraine, Belarus and Pakistan. The continents such as Asia and Africa could not survive the financial crisis. Asia has not had a mortgage crisis like many other places in the West. Many Asian nations have witnessed rapid growth and wealth creation in the recent years. This prompted Asia to make large investments in the Western countries. In addition, increased foreign investments in Asia were mainly from the West.

However, this crisis has shown an interconnected world, which means that Asia has had more exposure to problems emanating from the West. Many Asian countries have seen their stock markets to fall and a decline in the value of their currencies. Asian services and products are global and trade everywhere. Therefore, a slow-down in rich countries means an increased likelihood that demand for their products will fall because of decreased purchasing power. India and China are among nations with fast pace growth. Both are the biggest economies after Japan. From 2007-2008, the Indian economy was increased by 9%. However, even this

¹ Soros, George (2008). *America Must Lead a Rescue of Emerging Economies*, October 28; http://www.georgesoros.com/articlesessays/entry/america_must_lead_a_rescue_of_emerging_economies.

² House of Commons Treasury Committee (2009). *Shih: Banking Crisis: Dealing with the Failure of the UK Banks*; 21 April; fq14; <http://www.publications.parliament.uk/pa/cm200809/cmselect/cmtreasy/416/416.pdf>.

³ Fassin, Y. & Gossselin, D. *The Collapse of a European Bank in the Financial Crisis: An Analysis from Strategic, Stakeholder, Ethical and Governance Perspectives*; <http://ideas.repec.org/p/rug/rugwps/11-726.html>.

was not enough to protect it from the effects of the global financial crisis. The data show that until March 2009, India's growth has slowed soon to 7.1%.¹ Regarding Africa, ironically, the integration of Africa is generally weak with the other parts of global economy. It was thought that many African countries will not be impacted by the crisis, at least not in the early stages. In the recent years, there has been an increased interest for Africa by other Asian countries such as China. Since the financial crisis struck western nations, Africa has enjoyed an increase positive trade.² The hope for Africa was short-lived unfortunately. In the May of 2009, International Monetary Fund (IMF) warned that Africa's economic growth will fall due to global economic downturn. IMF predicted that the growth in Sub-Saharan Africa will slow down to 1.5% for the year 2009, below the rate of population growth.³

But if the following question is asked, what happened with countries that have large trade with U.S.A? If the African continent did not have a large trade with U.S.A, another part of the globe i.e. Latin America depends on the trade with U.S.A (as it absorbs half of the exports of Latin America). The effects of U.S. financial crisis will be also felt in Latin America. As such, this will hinder the economic growth for a long time. Because of its proximity to the U.S. and its close relationship to oil agreements and other agreements, Mexico is expected to have one of the lowest rates of growth in the coming years.

Even though, many funds were created by various Governments, the crisis and its consequences are obvious even today, in all of the continents, somewhere more and other places less.

3. The Effects of the Financial Crisis on the Labor Market

Between the start of the economic and financial crisis in 2008, and early 2010, almost four million jobs were lost in the eurozone area. Employment began to rise again in the first half of 2011, but declined once more at the end of that year and remains at around three million workers below the pre-crisis level.⁴ In the year of 2012, the world was facing a stark reality: one in three works in the labor force is currently unemployed. International Labor Organization predicts a deterioration of the employment for the youth. According to this organization, young people will

¹ Shah, Anup (2013). *Global Financial Crisis, March 24*;
<http://www.globalissues.org/article/768/global-financial-crisis>.

² Burimi. *IMF Middle East, North Africa Weathering Global Crisis*;
<http://www.imf.org/external/pubs/ft/survey/so/2009/car051009a.htm>.

³ Burimi (2009). IMF Push for More Help for Africa, May 20. BBC;
<http://news.bbc.co.uk/2/hi/business/8058993.stm>.

⁴ Euro Area Labour Markets and the Crisis, page 8, October 2012.

have three times more chances to be unemployed in comparison with older people. There are 75 million young people seeking employment in the entire world.¹

For the fourth consecutive year, global unemployment remained high. In the 2011, there were more than 197 million unemployed worldwide, a figure unchanged since last year, and it is still almost 27 million more than in 2007. The Number of unemployed around the world grew 5 million eight hundred thousand in 2008 and then rose by more than 21 million in 2009. This was an increase from a rate of 5.5 percent to 6.2 percent. Global unemployment remains stuck at a rate of about 6.0 percent, despite rapid economic growth of 5.1 percent in 2010 and 4 percent in 2011. In United States, the unemployment fell to 8.9% in the first quarter of 2011 from 9.6% in the fourth quarter of 2010. Government employment figures for April were also encouraging. However, GDP growth fell to 1.7% (annual rate) in 2011Q1, from 3.1% in 2010Q4.²

While production in European Union rose by only 0.9% in 2010Q4 (the latest available period), from 2.0% in Q3 and 4.1% in Q2. Unemployment also remained at 9.6 for the fourth consecutive quarter of 2010 (see chart 1).

Japan's GDP growth turned negative in 2010Q4, but when it was expected to rise in 2011Q1, fell back due to the earthquake and tsunami that struck this country (see Graph 1). Table 1 as shown below reflects GDP rates associated with unemployment graphs.

Table 1. Percentage of GDP (2007-2012)³
GDP 2007-2012 (%)

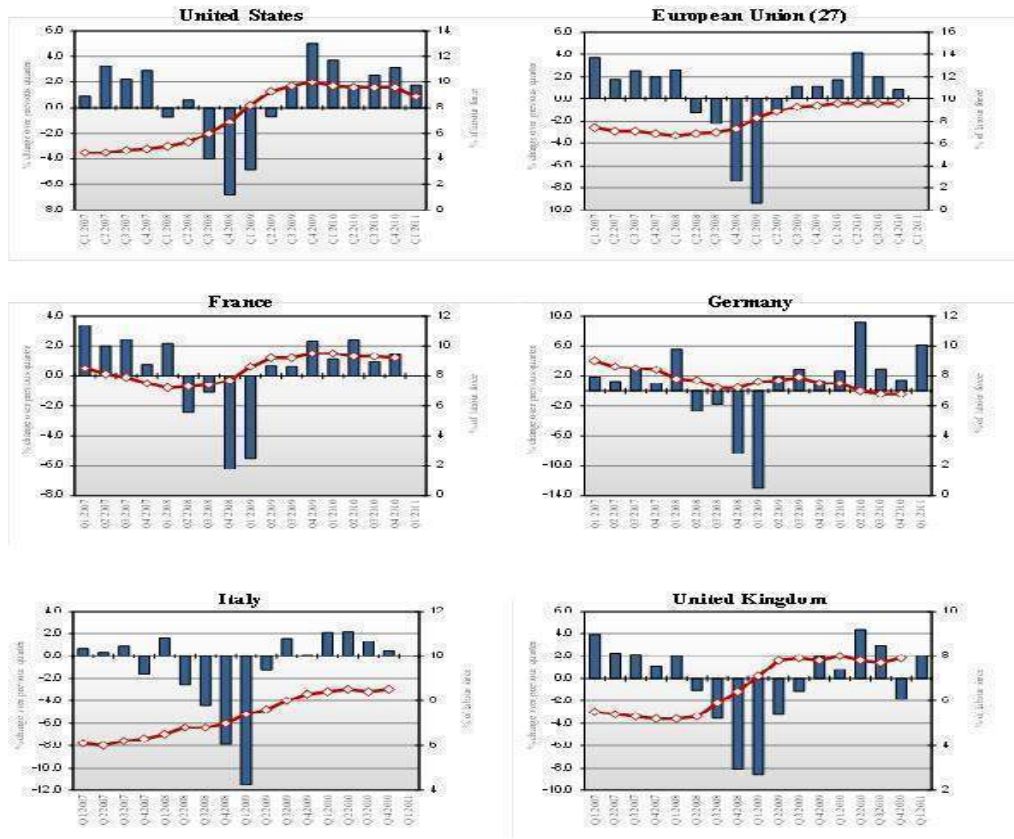
Country	2007	2008	2009	2010	2011	2012
Algeria	3.0	2.4	2.4	3.3	2.4	2.6
Argentina	7.9	3.8	-2.9	8.2	5.0	2.5
Australia	4.7	2.5	1.4	2.5	2.1	3.2
Austria	3.7	1.4	-3.8	2.1	2.7	0.8
Belgium	2.9	1.0	-2.8	2.4	1.8	-0.2
Brazil	6.1	5.2	-0.3	7.5	2.7	1.0
Canada	2.2	0.7	-2.8	3.2	2.4	2.0
Chile	5.2	3.3	-1.0	6.1	6.0	5.2
China	14.2	9.6	9.2	10.4	9.2	7.8
Colombia	6.9	3.5	1.7	4.0	5.9	4.3
Cyprus	5.1	3.6	-1.9	1.3	0.5	-2.3
Czech Republic	5.7	3.1	-4.5	2.5	1.9	-1.3
Denmark	1.6	-0.8	-5.7	1.6	1.1	0.6

¹ Report: Global Employment Trends 2013, page 56; http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_202326.pdf.

² Report on G20 Trade Measures, pg. 35; Mid-October 2010 to April 2011.

³ Global Labor Market Situation, pg. 34; <http://www.ilo.org>.

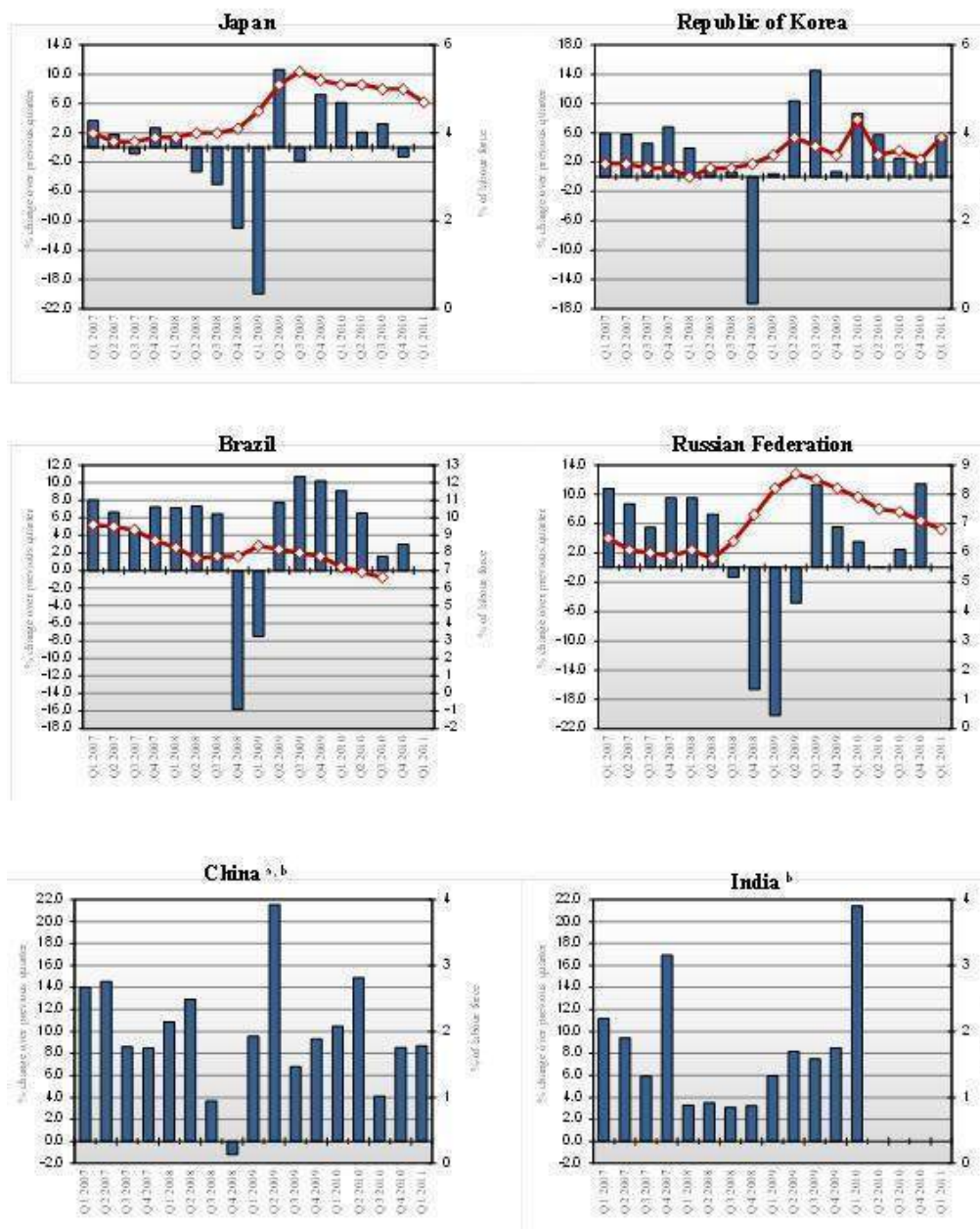
Egypt	7.1	7.2	4.7	5.1	1.8	2.0
Finland	5.3	0.3	-8.5	3.3	2.7	0.1
France	2.3	-0.1	-3.1	1.7	1.7	0.2
Germany	3.3	1.1	-5.1	4.2	3.0	0.7
Greece	3.5	-0.2	-3.1	-4.9	-7.1	-6.0
Hong Kong	6.4	2.3	-2.7	7.0	5.0	1.8
Hungary	0.1	0.9	-6.8	1.3	1.6	-1.2
Iceland	6.0	1.2	-6.6	-4.0	2.6	2.7
India	9.3	6.7	8.4	8.4	6.5	5.5
Indonesia	6.3	6.0	4.6	6.1	6.5	5.8
Iran	6.4	0.6	3.9	5.9	2.0	-0.9
Ireland	5.4	-2.1	-5.5	-0.8	1.4	0.4
Israel	5.9	4.1	1.1	5.0	4.6	3.1
Italy	1.7	-1.2	-5.5	1.8	0.4	-2.3
Japan	2.2	-1.0	-5.5	4.7	-0.6	0.6
Luxembourg	6.6	-0.7	-4.1	2.9	1.7	0.4
Malaysia	6.3	4.8	-1.5	7.2	5.1	4.4
Malta	4.1	3.7	-2.4	2.7	1.6	1.0
Mexico	3.4	1.2	-6.3	5.6	3.9	3.9
Morocco	2.7	5.6	4.9	3.7	4.9	2.9
Netherlands	3.9	1.8	-3.7	1.6	1.0	-0.3
New Zealand	2.9	-1.1	0.8	0.9	0.5	1.6
Nigeria	7.0	6.0	7.0	8.0	7.4	7.1
Norway	2.7	0.1	-1.6	0.5	1.2	3.1
Pakistan	6.8	3.7	1.7	3.1	3.0	3.7
Poland	6.8	5.1	1.6	3.9	4.3	2.4
Portugal	2.4	0.0	-2.9	1.9	-1.6	-3.0
Russian Federation	8.5	5.2	-7.8	4.3	4.3	3.7
Saudi Arabia	2.0	4.2	0.1	5.1	7.1	6.0
Singapore	8.9	1.7	-1.0	14.8	4.9	2.1
Country	2007	2008	2009	2010	2011	2012
South Africa	5.5	3.6	-1.5	2.9	3.1	2.6
South Korea	5.1	2.3	0.3	6.3	3.6	2.2
Spain	3.5	0.9	-3.7	-0.3	0.4	-1.4
Sweden	3.3	-0.6	-5.0	6.6	3.7	1.1
Switzerland	3.8	2.2	-1.9	3.0	1.9	1.0
Taiwan	6.0	0.7	-1.8	10.8	4.1	1.3
Thailand	5.4	1.6	-1.1	7.5	0.1	5.6
Turkey	4.7	0.7	-4.8	9.2	8.5	3.3
United Arab Emirates	6.5	5.3	-4.8	1.3	5.2	4.0
United Kingdom	3.6	-1.0	-4.0	1.8	0.8	-0.3
United States	1.9	-0.3	-3.1	2.4	1.8	2.2
Venezuela	8.8	5.3	-3.2	-1.5	4.2	5.8



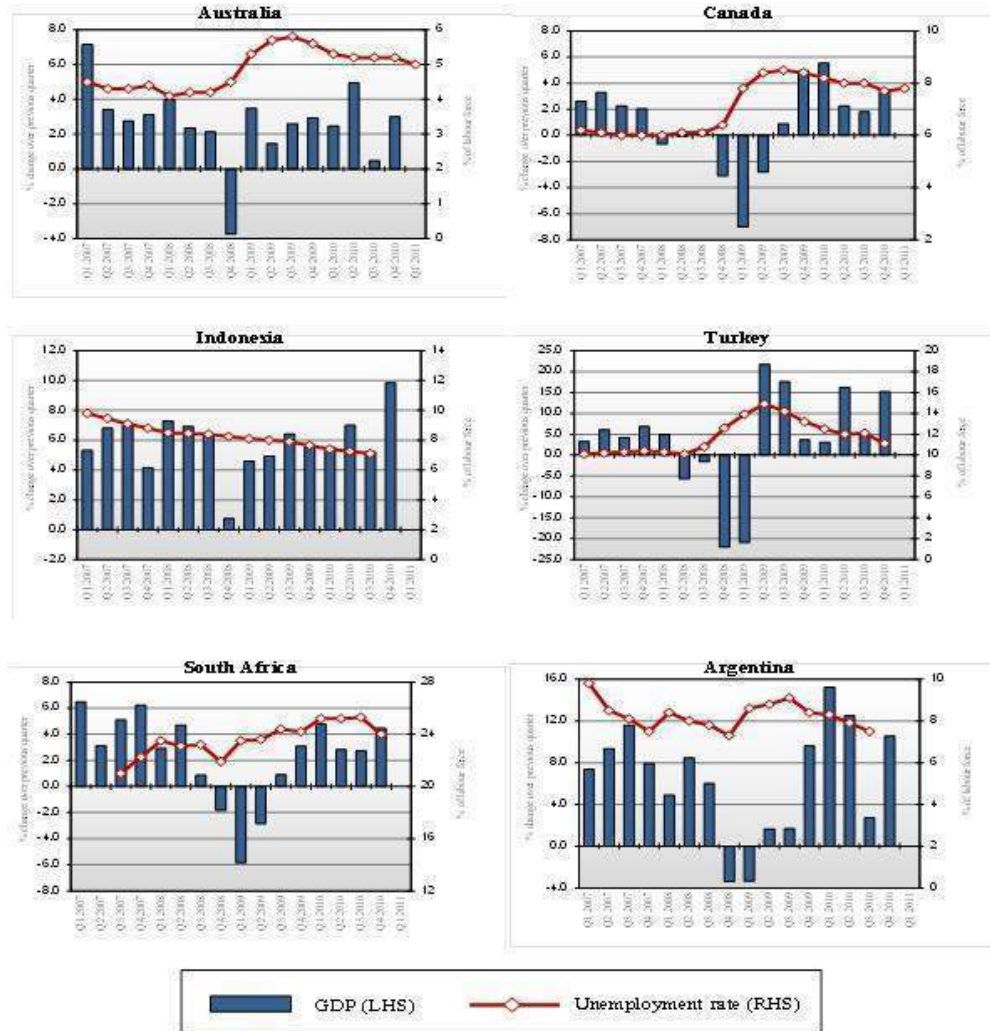
Graph 1. GDP and the Unemployment Rate (2007-2011)¹

Source: International Global Organization

¹ Report on G20 Trade Measures, pg. 27; Mid-October 2010 to April 2011.

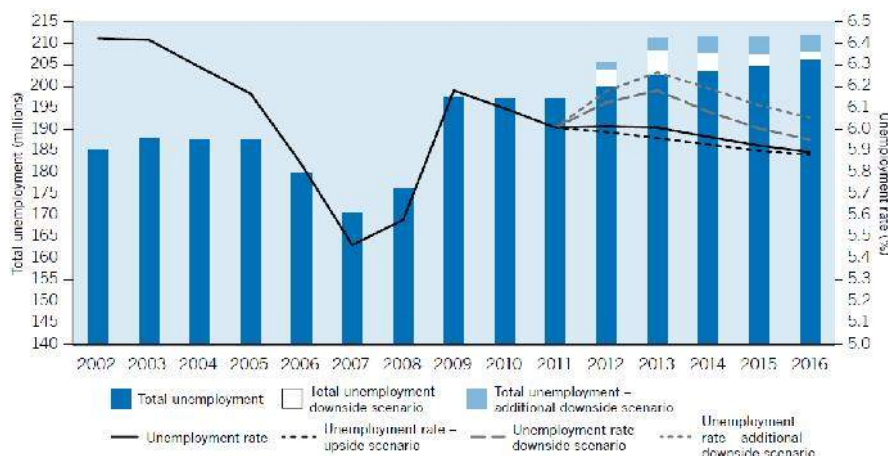


a GDP growth estimated based on year-on-year changes reported by China's National Bureau of Statistics.
 b Unemployment data not available.



Graph 1. GDP and the Unemployment Rate (Continued)

In graph no.2, we have presented the total number of unemployed in the world for the period 2002-2013. Data from 2013 are projected.



Graph 2. Rate of Unemployment in the World (Expressed in Millions and %)¹

Source: International Labor Organization

Based on the graph, we can see the effects of crisis on the labor market. The unemployment rate starts to rise significantly from 2007 and onwards. Fifty-five percent of the total increased global unemployment between 2007 and 2010 has occurred in the developed economies and the EU region, and the employment in the industry declined by 9.5 million between the 2007 and 2009.

Something disturbing to unemployment is the number of young people who are unemployed in the world. Only in 2011, 74 million young people aged 15-24 were unemployed. This was an increase of more than 4 million since 2007².

Massive increase in youth unemployment that occurred in developed economies and European Union region during the crisis was accompanied by a significant drop in the labor force of young people as participants in the labor market. In turn, this showed widespread discouragement among youth. Within the European Union, youth unemployment increased more than in any other region in 2009, and one in five economically active young people were unemployed in the region in the year of 2010.³

In the countries of Latin America and Caribbean Islands, after a contraction of GDP growth in 2009, economic growth expanded strongly in 2010. In contrast to many worlds' regions, the labor market in East Asia has recovered relatively

¹ *Global Labor Market Situation*, pg. 34; <http://www.ilo.org>.

² Report: *Global Employment Trends 2013: Recovering from a Second Jobs Dip*; http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/publ/documents/publication/wcms_202326.pdf.

³ *Global Employment Trends 2011, The Challenge of a Jobs Recovery* (ILO); Geneva, 2011; http://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/@publ/documents/publication/wcms_150440.pdf.

quickly. However, youth unemployment remains a major challenge because the rate of youth unemployment was 8.9 percent in 2010. This was 2.5 times higher than the adult rate. While in the Middle East, the decline in regional unemployment rate was interrupted by the global economic crisis. The estimates for 2010 showed a 25.4 percent a level of unemployment, which is the highest regional rate in the world. While in 2010, there were about 23.1% of unemployed active young people for work in North Africa

Table 2. Global Unemployment and Unemployment Rates (15-24), Adults (25 +) and Total (15 +), 2007-2012¹

	2007	2008	2009	2010	2011	2012p
Youth Unemployment (millions)	70.3	70.8	75.4	74.8	74.5	74.6
Adults Unemployment (millions)	99.7	104.6	121.2	121.1	121.5	127.9
Total Unemployment (millions)	169.9	175.3	196.6	195.9	196.0	202.4
The rate of youth unempl. (%)	11.6	11.7	12.6	12.7	12.6	12.7
The rate of adults' unempl. (%)	4.0	4.1	4.7	4.6	4.5	4.7
Total unemployment rate (%)	5.4	5.5	6.2	6.1	6.0	6.1
Rep. unemployed. Youth/Adults	2.9	2.9	2.7	2.8	2.8	2.7

Source: International Labor Organization

Table 3. Youth Unemployment Rate 2007 -2016, from Different Regions (%)²

	2007	2008	2009	2010	2011	2012p	2013p	2014p	2015p	2016p
World	11.6	11.7	12.6	12.7	12.6	12.7	12.7	12.7	12.7	12.7
Developed Economies and European Union	12.5	13.3	17.3	18.1	18.0	18.0	17.7	17.2	16.5	16.0
Central and South Eastern Europe (without EU) & CIS	17.5	17.0	20.5	19.4	17.6	17.5	17.6	17.5	17.5	17.5
East Asia	8.0	9.1	9.3	8.9	9.0	9.3	9.4	9.6	9.7	9.8
South-East Asia and Pacific	14.9	14.2	13.9	13.6	13.5	13.7	14.0	14.2	14.2	14.3
South Asia	9.0	8.6	9.1	10.2	9.8	9.8	9.7	9.7	9.8	9.8

¹ Report: Global Employment Trends for Youth 2012, p. 43; http://www.ilo.org/wcmsp5/groups/public/---dgreports/-dcomm/documents/publication/wcms_180976.pdf.

² Yes, there, p. 43.

Latin America & Caribbean	14.1	13.7	15.6	14.5	14.3	14.3	14.4	14.5	14.5	14.6
Middle East	24.8	25.7	25.2	25.4	26.5	26.9	27.5	28.0	28.6	29.0
North Africa	23.8	23.0	23.6	23.1	27.9	27.8	27.6	27.3	26.9	26.7
South Africa	11.5	11.5	11.5	11.4	11.5	11.5	11.5	11.4	11.4	11.4

Based on unemployment rate, Albania is ranked fifth in the region after Macedonia (33%), Bosnia and Herzegovina (24%), Serbia (17.4%) and Turkey (14%). Meanwhile, after Albania (13%) is ranked: Montenegro (11%), Greece (9.4%) and Croatia (9.2%). By doing a timing analysis from the table (see table 4), we can see that the country with the drastic reduction of the unemployment rate during the last decade is Montenegro. However, the country with the largest increase of unemployment appears to be Turkey.

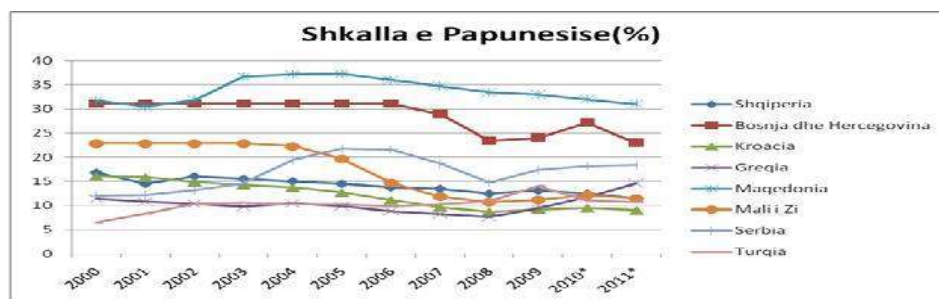
Table 4. Unemployment Rate for the Albania and the Region (%)¹

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	^{2010*} 2	2011*
Albania	16.8	14.5	16	15.5	15	14.5	13.78	13.5	12.5	13.1	12.5	11.5
Bosnia and Herzegovina	31.096	31.096	31.096	31.096	31.096	31.096	31.096	29.013	23.408	24.068	27.202	23
Croatia	16.077	15.841	14.831	14.282	13.769	12.708	11.129	9.583	8.7	9.2	9.5	9
Greece	11.35	10.75	10.325	9.725	10.492	9.9	8.892	8.292	7.683	9.375	11.756	14.622
Macedonia	31.727	30.515	31.944	36.687	37.161	37.3	36.025	34.741	33.46	33	32	31
Montenegro	n/a	n/a	n/a	22.9	22.3	19.7	14.7	11.9	10.7	11.2	12.2	11.5
Poland	16.098	18.264	19.942	19.643	18.974	17.745	13.84	9.603	7.118	8.166	9.836	9.167
Rumania	10.884	9.362	9.467	7.592	6.7	5.767	5.425	4.308	3.975	6.275	7.205	7.105
Serbia	12.1	12.2	13.28	14.63	19.5	21.8	21.6	18.8	14.7	17.4	18.208	18.407
Turkey	6.497	8.335	10.333	10.495	10.25	10.203	9.856	10.244	10.945	14.028	11	10.658

Source: IMF

¹ IMF; <http://www.imf.org/external/data.htm>.

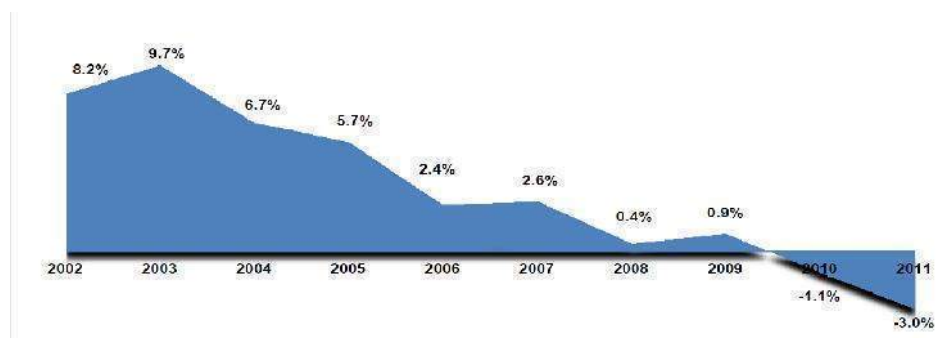
²Note: *IMF evaluations.



Graphic 3. Unemployment Rate for Albania and the Other Regional Countries

Source: IMF

Regarding Albania and Kosovo, administrative data are the only available source for tracking labor market developments in the past two years. In Albania (which publishes quarterly data only), the number of registered unemployed has remained constant throughout 2011. However, in Kosovo, the registered unemployment rate was stable until December 2011 when it began to decline sharply. But, this was mainly due to administrative changes (digitization of unemployment database).



Graphic 4. Registered Unemployment in the Republic of Kosovo¹

Source: Ministry of Labor and Social Welfare

According to public employment services (PES) in Kosovo, the accumulated number of registered unemployed accounts for 325,261 until the end of 2011. Given data show decline for the second time of -3.0% for 12 months. Thus, this is a quite significant indicator if compared with the results of the 12 months of growth from 2009. However, it is still far below the results of previous years (see graph.4).

According to the results of the Labor Force Survey published by the KAS (Kosovo Agency of Statistics), the unemployment rate in Kosovo on the first half of 2012 was 35.1 percent. Based on the results presented, the unemployment rate is higher

¹ Yearly report, p. 13; 2011.

in rural areas (40.1 percent) compared to urban areas (28.5 percent), and unemployment is higher among woman's (44.4 percent) than men (32.0 percent). The main concern and the high level of unemployment among young people aged between 15-24 (65.1 percent).¹

Table 5. Employment and Unemployment Rate in Kosovo (%)²

	Employment Rate³	Unemployment Rate⁴
Kosovo	23.9%	35.1 %
Urban	29.8%	28.5%
Rural	20.2%	40.1%
Male	37.0%	32.0%
Female	10.3%	44.4%
Youth	9.0%	60.2%

Source: Kosovo Agency of Statistics (from January to June 2012)

3.1. The Impact of Financial Crisis on the Import and Export of Goods

Among developed countries, the exports in United States continue to grow at a faster rate than those from Japan. The latter has been affected by supply disruptions due to natural disasters that occurred in 2011.⁵

In the EU, the intra-regional trade that accounts for a large part of the trade among the member states has suffered as a result of the current economic recession of the region. Looking at a longer period specifically since 2006, the trade volume of member states has almost stagnated in the first months of 2012 in comparison with the year of 2006. As such, EU exports were only 8 percent higher and imports were approximately at the same level.

¹ Centralna Banka Republike Kosova. Balance of Payments Report, p. 12; http://www.bqk-kos.org/repository/docs/2013/CBK_BOP_No_12_2013.pdf.

² KSA (2012). *Labor Force Survey 2012. Results for the First Half of 2012*, p. 2012; http://esk.rks-gov.net/ENG/publikimet/doc_view/1081-labour-force-survey-2012-results-for-the-first-half-of-2012?tmpl=component&format=raw.

³ Labour Force Participation Rate - the percentage of the population of working age (15-64 years) who are in the Labour Force.

⁴ Unemployment rate – percentage of unemployed persons in the active population aged 15 to 64 years.

⁵ Report by the secretariat of the United Nations Conference on Trade and Development, 2012; (pg. 7) (http://unctad.org/en/PublicationsLibrary/tdr2012_en.pdf).

Faced with weak external demand from developed countries and increased global uncertainties, export growth in developing countries and of those economies in transition have also registered a slowdown to 7 percent and 6 percent respectively in 2011.

However, such slowdown has continued also in 2012 due to near to zero growth in imports in Europe. The latter is the largest trading partner for many developing countries. Some Asian developing countries will be most affected by sluggish demand from developed countries. This occurs as their exports mainly manufacturing are highly dependent on the markets of developed countries.

South Asia and West Asia have been exceptions, because their exports have increased in 2011. But, this is somewhat misleading, as this increase was from the low levels in 2010, when some major economies in these regions such as India and Turkey managed to pass over the levels that both had recorded in 2008.

In other developing regions and in the economies in transition, the export figures were slowed during the first half of 2011. However, the prospects looks good for 2012. These countries have benefited from significant gains of the trade terms in 2011, as the purchasing power of their exports has increased above what their volume would allow. The opposite has happened in most Asian countries, where the volume of imports grew more slowly as opposed to exports' volume.

Table 4. Export and Import Volume of Goods in Selected Regions and Countries, 2008-2011¹ (Annual Change in Percentage)

Region/Country	Export Volume				Import Volume			
	2008	2009	2010	2011	2008	2009	2010	2011
World	2.4	-13.1	13.9	5.9	2.5	-13.4	14.1	5
Developed Countries	2.5	-15.2	13.2	5.1	-0.2	-14.5	11	3.5
Japan	2.3	-24.9	27.5	-0.4	-0.6	-12.4	10.1	1.9
United States	5.5	-14.9	15.3	7.2	-3.7	-16.4	14.8	3.8
European Union	2.4	-14.3	12	6	0.8	-14.2	10	3.2
Economies in Transition	-0.2	-14.4	11.5	6	15.5	-28.6	15.5	17
CIS	-2.6	-11.4	13.3	2.3	22	-32.5	18.2	19.1
Developing Countries	3.2	-9.7	15.4	7	6.6	-9.9	19.2	6.2
Africa	-3.1	-9.7	8.7	-5.1	10.6	-3.9	7.1	3.9
South Africa	-4.1	-8	10.2	2.9	3.2	-4.4	8.8	7
Latin America and the Caribbean Islands	-0.3	-11	10.3	3.4	8.5	-17.9	23.3	7.1
East Asia	7.3	-10.6	23.8	9.9	0.4	-5.3	25	7.5
China	10.6	-13.9	29	12.8	2.3	-1.8	30.8	10.6

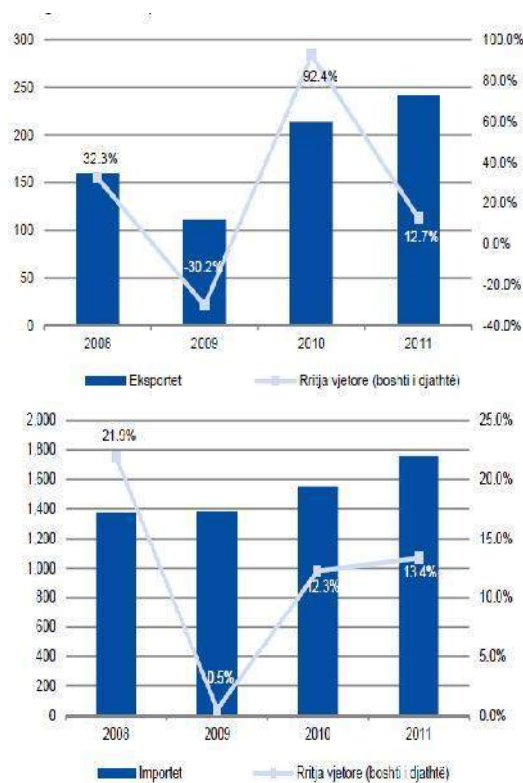
¹ The Unctad Handbook of Statistics 2012, p. 14;
http://unctad.org/en/PublicationsLibrary/tdstat37_en.pdf.

South Asia	6.8	-6	6	9.1	20.9	-5.6	13.9	4.1
India	16.8	-6.6	5.9	13.7	29.7	-0.8	13.8	5.3
South-East	1.6	-10.9	18.8	4.5	8	-16.3	21.9	6.1
Western Asia	4.4	-1.1	2.6	12.7	12.5	-11.5	5.4	3.8

Source: United Nations Conference on Trade and Development

Even the poor economy of our country was certainly affected from the financial crisis. Ongoing increase of the trade exchanges between Kosovo and other countries has impacted the degree of trade openness (measured as the sum of exports and imports relative to GDP) to record an upward trend in recent years (57.4 per cent by September 2011, 55.9 percent until September 2010). The high dependence of the Kosovo's economy on imports made that the level of imports in the country to be significantly higher than the level of exports. Consequently, the coverage of imports with exports continues to remain at a relatively low level (13.7 percent), a level not much changed from the same period of the last year. By September 2011, Kosovo's trade balance recorded a deficit of 1.5 billion euros (43.6 percent of GDP), which represents an annual increase of 13.4 percent. In the export structure of Kosovo, base metals continue to be the dominant category with a share of 62.1 percent. By September 2011, Kosovo's imports reached a value of 1.76 billion Euros. This represented an annual increase of 13.4 percent. However, the nominal growth of 13.4 percent reflects the increase in prices of imported products, respectively the increase of the oil prices. The annual real growth of imports until September 2011 was only about 4 percent.

The structure of Kosovo's imports continues to remain similar with to the previous years. The largest category of imports continues to be represented by mineral products, which until September of 2011 increased their share to 21.5 percent, compared with 19.6 percent in September of the 2010. In the context of mineral products, Kosovo mostly imports fuel and ceramic products.



Graph 5. Exports and Imports in Kosovo (in mil. euro and %)¹

Source: Kosovo's Central Bank

The second category of share to total imports of Kosovo consists of food and beverage products which recorded a turnout of 12.2 percent. This was followed by machinery and equipment which were represented 10.1 percent of total imports in Kosovo (up 13.4 percent in September 2010). Machinery and equipment until September 2011 reached a value of 178.4 million euros, which represents a yearly decrease of 14.2 percent.²

The other important category of imported products in Kosovo consists of base metals, which recorded a share of 9.4 percent (8.9 percent until 2010).

The current account deficit in Kosovo during 2012 decreased significantly, reaching a level of 379.4m euros, a level which compared to 2011 represents a decrease of 42.4 percent. Substantial decrease of the current account deficit is largely influenced by which imports during 2012 were lower by 1.0 percent

¹ The Report of Balance of Payments (Central Bank of Kosovo) p. 14, March 2012.

² Yes there, p. 17.

compared with the previous year. Also, the increase in exports of services in 2012 led to a lower current account deficit.¹

4. Conclusion

The financial crisis that erupted in 2008 had a substantial impact on the labor market and income for citizens all over the world. The crisis affected directly or indirectly many of world's regions. The causes that led to the financial crisis are numerous and widely quoted in the literature and media worldwide but what characterized this crisis is:

- the speed at which the crisis spread from the United States of America towards other countries, especially in Europe;
- its global spread in comparison with other crises, which have been concentrated in a country or a limited region.

It's worth noting that the timing and the density of crisis continues to have a heterogeneous impact between countries. Some countries risked their bankruptcy (Greece and other countries of Southern Europe), while others handled crisis due to austerity measures that were taken. Though, almost five years have passed since the beginning of this crisis, the economy of all countries that were affected by the crisis continues to be in an ongoing recession with direct effects on unemployment, export, import, and foreign direct investment. As such, the crisis can be historically compared with the Great Depression due to its overall impact.

As a result of the crisis, many companies and industries have collapsed, and thus having a direct impact on the labor market. We can see that since the beginning of the crisis in 2008, unemployment in the EU has increased for about 2.1% (August 2008-August 2011). At the same time, across the ocean, in the United States of America, the level of unemployment rate after the measures that were taken remains relatively high (7.8% in September 2012). But, this has a tendency to decrease and be significantly lower than in the EU member states.

It can be concluded that the financial crisis, which has gripped the continent has fundamentally changed the role of economic and political actors. One of the fundamental issues in democratic countries is the role a country should or should not play in a market economy.

¹ Centralna Banka Republike Kosova. Annual Report 2012, p. 77; <http://www.bqk-kos.org/repository/docs/2013/BQK-RV-2012.pdf>.

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The Largest Emerging Market Economies as a Part of the World Economy

Sorina Botiș¹

Abstract: The aim of this paper is to demonstrate the new and increasing economic and political power of the largest emerging economies as a part of the world economy, their fast economic growth based on the main economic developments during the last three years. The paper also presents the significant influence of the five BRICS countries (Brazil, Russia, India, China and South Africa) on regional and global affairs, representing almost 43% of the world's population, 30% of its dry surface, producing 25% of global gross domestic product, attracting 53% of the world capital and holding foreign reserves totaling approximately 4500 billion US dollars. The huge economic potential of these five countries from the BRICS Group is such that they could become the world's most dynamic and dominant economies. The paper also highlights the low performance of the emerging world, in terms of inflation and unemployment and concluded that currently, despite the economic difficulties faced by the Western developed countries and according to trends in the world economy, emerging economies continue their rapid economic growth.

Keywords: developing economies; global economic system; foreign reserves; BRICS

JEL Classification: E02; F15; F43; O11

1. Introduction

The term „emerging market” was coined by Antoine van Agtmael in the 1980s and is used for countries which are considered to be in a transitional phase between developing and developed status. Dr. Vladimir Kvint, president of the International Academy of Emerging Markets, defines the emerging market as: “... a society transitioning from a dictatorship to a free-market-oriented-economy, with increasing economic freedom, gradual integration with the global marketplace, an expanding middle class, improving standards of living and social stability and tolerance, as well as an increase in cooperation with multilateral institutions.” (Kvint, 2009, p. 11)

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The World Bank defines emerging markets as low-income to middle-income countries with gross national income (GNI) per capita between \$975 and \$11,900, those that haven't reached the minimum gross national product (GNP) per capita of \$9656.

According to Julien Vercueil, more than 50 countries, economies, and/or political entities comprise the emerging markets of the world contributing over 60 percent of the world's population and at least 45 percent of its gross domestic product (GDP). Brazil, Russia, India, China, Mexico, Indonesia, Turkey, and Poland are among the largest emerging market economies. (Vercueil, 2012, p. 232)

Regardless of the approach, emerging economies have as common traits:

- transitioning from a closed economy to an open market economy;
- implementing economic reforms;
- increasing in both local and foreign investment(portfolio and direct)
- rising production levels, and thus increasing GDP;
- stabilizing the political climate;
- shifting balance of economic power from sellers to buyers (Kalinowski, 2012, p. 11).

Currently, the twenty countries listed in the Table 1, are classified by MSCI Barra, as emerging markets:

Table 1. Emerging Markets/ GNI per Capita (Current US\$) – 2012

America	GNI per capita(\$)	Europe, Middle East & Africa	GNI per capita(\$)	Asia	GNI per capita(\$)
Brazil	11.630	Czech Republic	18.130	China	5.680
Chile	14.280	Hungary	12.370	India	1.530
Colombia	6.990	Poland	12.660	Indonesia	3.420
Mexico	9.600	Russia	12.700	Korea	22.670
Peru	5.880	Turkey	10.830	Malaysia	9.800
		Egypt	3.000	Philippines	2.470
		Morocco	2.950	Thailand	5.210
		South Africa	7.610		

Source: MSCI Barra, www.msci.com

The emerging economies are grouped under several terms such as BRIC, which is used to describe the largest developing countries of Brazil, Russia, India and China, BRICS (+ South Africa), BRICET (BRICS + Eastern Europe + Turkey), BRIK (+ South Korea), the Next Eleven, known also by the numeronym N-11,

including the following eleven countries: Bangladesh, Egypt, Indonesia, Iran, Mexico, Nigeria, Pakistan, Philippines, Turkey, South Korea and Vietnam.

2. BRICS – the Major Emerging Economies of the World

The acronym BRIC was used for the first time in 2001 by Chief Wizard of the Bank Goldman Sachs, the economist Jim O’Neill (O’Neill, 2001, p. 9), in an attempt to bring together under a title the biggest emerging economies of the world. The report drafted by him, “Building Better Global Economic BRICs”, drew attention to Brazil, Russia, India and China, which with their economic growth rate, population size and economic potential, can become major economies until 2030. The BRIC group acquires an official character in the first summit which took place on June 16, 2009 in Yekaterinburg, Russia. In the context of the third summit which was held on April 14, 2010, the BRIC becomes BRICS through joining South Africa to the Group, at China’s initiative, as an expression of the Group’s presence on the African continent. Totaling currently no less than 43% of the world’s population, 30% of its dry surface, producing 25% of global GDP, attracting 53% of the world capital and holding foreign reserves totaling approximately 4500 billion US dollars, the BRICS has come to represent more than an acronym, becoming a group of countries with an increasingly higher influence in the global economic and financial system, being possible that in the future to move the centre of economic and political power from the developed countries to the emerging economies.

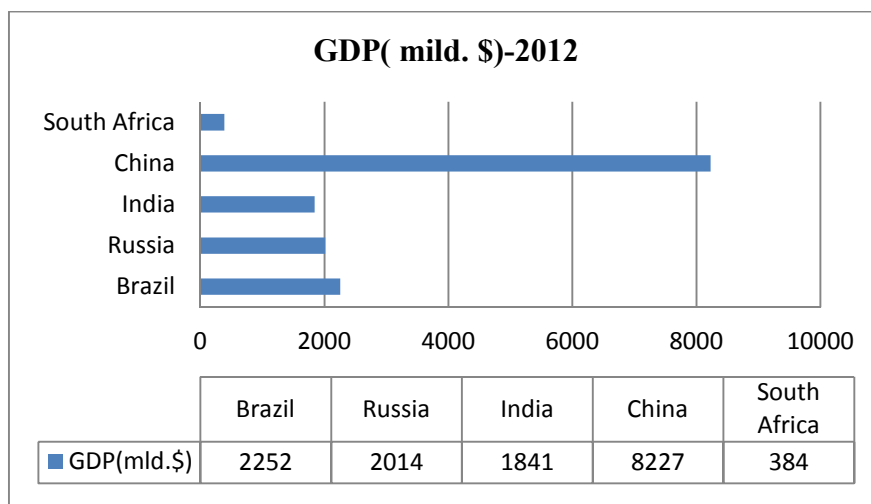


Figure 1. The GDP of the BRICS Countries in 2012

Source: Author – Representation of the Data from The World Bank Group: Data Bank 2012, Available at: www.dataworld.org

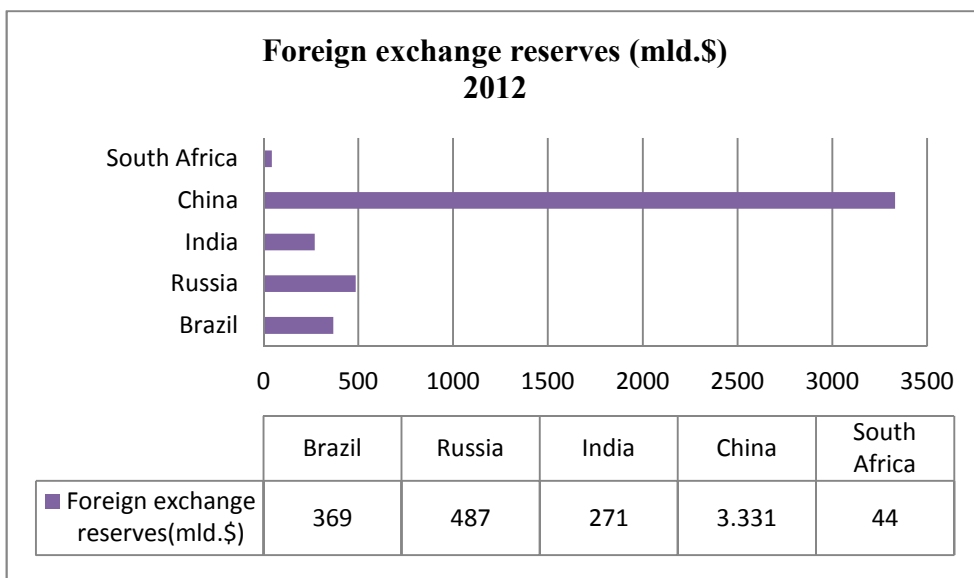


Figure 2. The Foreign Exchange Reserves of the BRICS Countries in 2012

Source: Author – representation of the Data from The World Bank Group: Data Bank 2012, Available at: www.dataworld.org

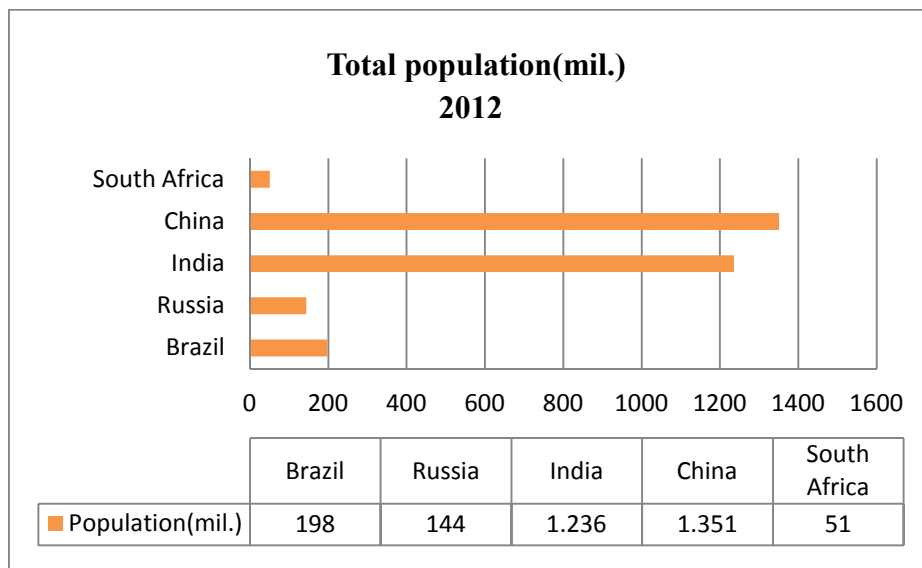


Figure 3. The Total Population of the BRICS Countries in 2012

Source: Author - Representation of the Data from The World Bank Group: Data Bank 2012, Available at: www.dataworld.org

BRICS group was founded for political and economic reasons, settling as major objectives to protect their own economies and the internal resources from the pressures of the global corporations, giving up the external financial assistance and to leave behind the financial practices of World Bank and International Monetary Fund, engaging in competition with Western economies and diminishing the political influence of the G-7, the international coordination of macroeconomic policies, and last but not least, the establishment of a new equilibrium in the global geopolitical relations through the establishment of a new pole of power.

During the last summit of the Group, held in Durban, South Africa, on 26 and 27 of March 2013, the leaders of the five countries have established a common development bank which will finance only the emerging countries. At the same time, will allow the creation of resources for financing the national projects in the field of transport infrastructure, and the first major such project, worth 1.2 billion US dollars, would have to be a submarine cable for the transmission of high data flow between Brazil and Russia, passing through South Africa, India and China with the possibility of extension for Iran and Indonesia, what is a global system of internet via fiber optics, independent of that of the West. The establishment of this Bank, with a capital of 50 billion US dollars (10 billion US dollars for each member), it means the independence from the World Bank and from the policy applied by the International Monetary Fund in financing agreements ratified with the poor countries. In this sense, the five states of the Group take into account the use of a part of their enormous foreign exchange reserves, meaning about 4.502 billion US dollars, as a common fund to tackle balance of payments crises or currency crisis. According to the Governor of the Central Bank of Brazil, the value of that fund might be 100 billion US dollars, enough to afford and to ensure the independence of the two international financial institutions.

These important foreign reserves are used by the Group to invest in countries on the African continent, in South America and in the EU countries, as a strategic stake in the competition for new spaces of influence. China, which has become the richest country in the world, holds an impressive foreign reserve, 3.331 billion US dollars (see Figure 2), that distinguish it as the global financier. The surplus of the international trade in goods and the massive foreign investment in the economy, are the main ways of its formation. Given the sustained annual growth of foreign exchange reserve, 43% in 2007, 27.3% in 2008 to 23.3% in 2009, 18.7% in 2010, 11.7% in 2011 (NBSC, 2012), it is important to diversify the channels through which it can be invested. Overall the foreign investments of China consist mainly of portfolio investment, direct investment in sectors considered strategic (oil or gas) and takeover of Western companies.

More than one-third of China's foreign reserves represent public securities issued by the U.S. Treasury, currently totaling 585 billion US dollars, China being the

main holder of the U.S. Treasury bonds in the world, outpacing Japan which holds public securities worth 573, 3 billion US dollars. (The United States Treasury)

An important part of China’s foreign exchange reserve is used to support state companies to acquire strategic assets in energy, finance projects that enable access to technologies, targeted investment in natural resources.

3. The Foreign Direct Investment Flows of the BRICS Countries

Over the years 2010-2012, the BRICS countries, especially China and Russia have strengthened their position as the global investors, providing significant financial resources used for the acquisition of strategic assets abroad, considering the fact that their value has decreased as a result of the international economic and financial crisis.

China's foreign direct investment abroad, in 2010 was worth \$68.9 billion, in 2011 was worth \$74.7 billion and reached the amount of \$84.2 billion in 2012. Russian foreign direct investment outside the country, were worth \$52.7 billion in 2010, increased to \$66.9 billion in 2011, dropping to \$51.1 billion in 2012. Russia stands in the ranking of FDI generating countries. (see Figure 4)

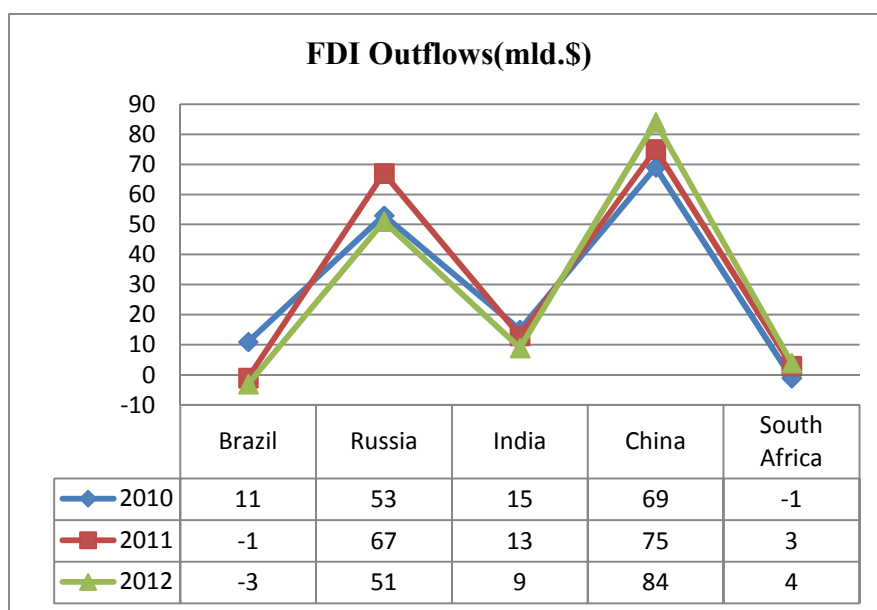


Figure 4. The BRICS Countries FDI Outflows between the Years 2010 2012

Source: Author – Representation of the Data from OECD International Direct Investment Database, International Monetary Fund, United Nations Conference on Trade and Development (UNCTAD), World Investment Report 2013, Available at: www.unctad.org

China's investment in large-scale projects on the African continent, roads, railways, petrochemical plants, port terminals, computer science, telecommunications technology, between 2006-2012, were estimated at \$67 billion. At the same time China invests 20 billion US dollars in Africa (double the amount offered in the framework of the forum for cooperation between China and Africa, which took place in 2009), as a credit line for the development of the local natural resources exploitation projects, financial support to agriculture, manufacturing and small business development in Africa.

According to the Chinese Ministry of Commerce, the Chinese investment abroad surged by 150% in the first two months of 2013, the Chinese companies are investing \$18.39 billion outside the border. (NBS, 2012)

China also accelerates investments in South America, Argentina being the second destination of Chinese investment, represented by 5.6 billion US dollars in 2012, particularly in agriculture and oil sectors, seeking the access to a wide variety of natural resources.

Also China has invested \$12.6 billion in European companies in 2012, pursuing the increasing access to cutting-edge technology, twice higher than FDI placed in the U.S. businesses. The Chinese investment projects were in number of 268 in Germany, 108 in the United Kingdom, 50 in France and 34 in Italy. China will build in Romania since 2014, a thermal power plant worth one billion Euros, making the biggest investment in the European Union.

According to statistics provided by the Chinese Ministry of Commerce, Chinese investment in Australia increased by 281, 8%, in Hong Kong by 156%, in the U.S. by 145, 7% and in the EU countries by 81, 9%.

The Russia's foreign investment is focused on investing in assets from the profitable industries. Approximately 53% of the Russian assets abroad are held by four companies specialized in hydrocarbons, 25% belong to a group of nine companies specialized in steel and mining. Their value has accounted for 1.6% of GDP in 2012, less than in previous years, 2.8% in 2010 and 2.6% in 2011. Russia has conducted 63 investment projects in Germany, 38 in the United Kingdom and 15 in France. From among the BRICS countries, FDI generated by Russia have the largest percentage of the GDP, 2.8% in 2010, 2.6% in 2011, and 1, 6% of the GDP in 2012. At the same time, Russia has invested \$ 77.5 billion in the economies of the European Union countries, of which 53 billion US dollars were direct investment, accounting for 60% of total Russian investment abroad.

Although decreased by about 44% in 2012 compared to 2010 (from \$15.3 billion in 2010 to \$12.6 billion in 2011 and \$8.6 billion in 2012), India's foreign direct investment abroad (see Figure 4) have resulted in an increase in greenfield investments, especially in the extractive industry, the metallurgical and in the

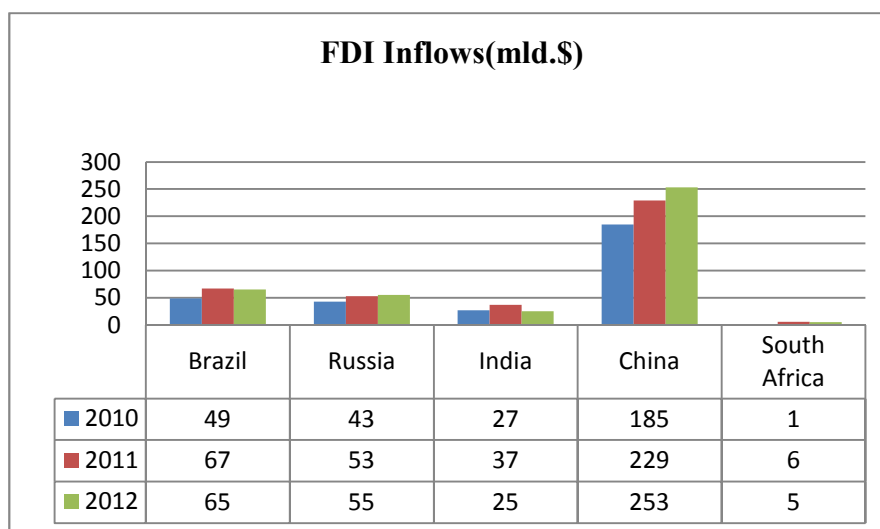
services for business. India's investments abroad are directed to the USA, the United Kingdom and South East Asia. The UK received most of the investment projects, India being the 8th investor in this country, Indian companies having here more than 440 investment projects. The number of Indian investment projects between 2003 and 2011, was 96 in Germany, 30 projects in France and 14 in Italy.

Brazilian investors have as their favorite destinations countries such as the United Kingdom with 16 investment projects, France with 13 investment projects, Germany with 6 projects and Italy with an investment project, despite the fact that the value of FDI flows generated by Brazil, was negative in both 2011 and 2012.(see Figure 4)

The emerging market companies continue the tendency of expansion in European markets. Thus in the first half of 2012, the entrepreneurs of Brazil, Russia, India and China have generated 5.7% of FDI and 7% of the jobs created in Europe.

Globally, the FDI flows dropped by 18 percent to \$1.35 trillion in 2012 compared to \$1.65 trillion in 2011, in contrast to other macroeconomic variables such as the global gross domestic product, trade, unemployment rates, which all remained relatively constant in 2012 compared with 2011. For 2013 the FDI flows are estimated to \$1.45 trillion, and with the regaining of the investor confidence in the international business environment, it is expected that the FDI flows will reach the level of \$1.6 trillion in 2014, and \$1.8 trillion in 2015. (The World Bank, 2011) For the first time, in 2012, emerging economies have attracted foreign direct investment of more than \$700 billion, representing 52% of global FDI, unlike the developed economies, \$561 billion.

Last year, 44% of global FDI had as a final destination just five countries. China attracted a record level of the foreign investment with \$253.4 billion, 18% of the total and 3.1% of GDP (The World Bank, 2013)



**Figure 5. The FDI Inflows in the BRICS Countries between the Years
2010-2012**

Source: Author –Representation of the Data from OECD International Direct Investment Database, International Monetary Fund, United Nations Conference on Trade and Development (UNCTAD), World Investment Report 2013, Available at: www.unctad.org

In the BRICS, China continues to lead in 2013. Only in February this year, FDI inflows increased by 6.32 % to \$8.21 billion. The European Union is the main investor, whose foreign direct investment in China rose by 34.01% to \$1.21 billion, while the U.S. investment fell by 5.37%, their value being of \$497 billion. The most important area is that of the alternative energy in the context of the abundance of natural resources and of the increasing demand for energy, the field where China is the world leader of attracted investments with \$54.4 billion in 2010 and 103,3 GW installations in renewable energy production capacity. FDI inflows are directed selectively to peak areas as well as in the sphere of services (in 2012 they have recorded an increase of 4.8% from the previous year), focusing on the China's economic policy interests.

Between the years 2012-2014, among the host countries for FDI, China ranks no. 1, followed by the U.S., India no.3, Brazil the 5th place, Russia and Germany the 6th place, South Africa being present for the first time in this top ranked 14, number 42 in 2011.(The World Bank, 2013)

4. The Economic Prospects for the BRICS Countries

The annual rate of GDP growth in the emerging economies of the BRICS during 2010-2012, highlights the potential of international pressure of the BRICS, maintaining the role of the engine of the global economy. The combined gross domestic product of the BRICS countries, increased in 2012 to over \$14.8 trillion.

We notice a slowdown in GDP growth rhythms in the BRICS countries in 2012, because these countries still depend on the U.S., the EU and the euro zone which are affected by their unfavorable economic and financial situation.

China's GDP was about \$8.2 trillion in 2012, which represents more than a half of the U.S. GDP of approximately \$15.7 trillion, and in terms of the annual growth rate of 7.9%, Chinese GDP growth in 2012, is equivalent to an increase of 2.2%, the rate of growth of the United States GDP, surpassing Japan for the second consecutive year. The industry contributed with 46.8% to the Chinese GDP, the services with 40.5% and the agriculture with 10.1%. (CIA World Factbook, 2012) The Chinese GDP annual growth was 9.3% in 2011, over the government target of 8%, but below the level of 10.4% in 2010, and also a decrease to 7.9% in 2012. Slowing the pace of GDP growth generates a number of negative effects, aimed at including the level of employment of the workforce. Thus the unemployment rate grew in China to 6.5% in 2012, compared with 4.3% in 2010.

Decrease in the pace of economic growth is due on the one hand to the debts problems in the euro area, the fall in consumption and demand from major export markets (the U.S. and the euro zone), and on the other hand, the measures taken by the Chinese Government to reduce the inflation rate (3.3% in 2011 compared to 5% in 2010), the restrictions on bank lending and the real estate speculations.

According to Chinese officials, this evolution can be explained through a strategic reorientation of the Government's economic policy to more moderate growth rates, considering that the Chinese economy has fulfilled the objective of being able to compete on an equal position with the developed Western economies.

However, China remains a developing country with a GDP per capita of only \$ 6.091, people living in the vast majority still relatively modest. Within the group, Russia has the highest GDP per capita (\$ 14.037 in 2012), followed by Brazil with \$ 11.340. (see Figure 6)

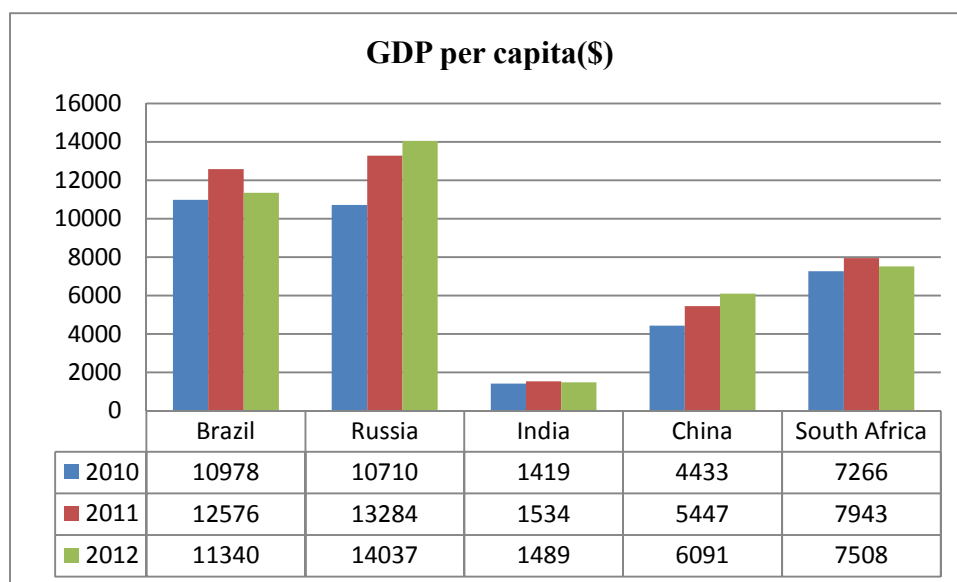


Figure 6. The GDP per Capita of the BRICS Countries between the Years 2010-2012

Source: Author – Representation of the Data from The World Bank Data Bank, Available at: www.dataworld.org,

Report for Selected Countries and Subjects, International Monetary Fund

According to the Ernst & Young Report, “Rapid Growth Market Forecast (RGMF) (Ernst & Young, 2013), “over the next 25 years, the poles of economic power will be changed, China, India, Brazil and Russia will enter as the first six world economies“. The same report also estimated that the global GDP will grow at an annual rate of 4.1% between 2011 and 2020, compared with a growth rate of 3.5 percent in the three previous decades.

The investments in the real economy will remain the main engine of economic growth; the fields most aimed are transport infrastructure, communications, production, education and research.

5. Conclusion

The decision of these five emerging countries to constitute a joint development bank, funded only by them, will allow them to implement policies appropriate to their own economic and financial interests, countries which according to statistics currently provides global economic growth, attracting no less than 53% of the capital of the world.

China continues to remain the most attractive destination for the foreign investors, being the main receptor of foreign investment globally. However, foreign investor confidence continues to move towards European countries, the economic issues facing the region being outweighed by the presence and concentration in the European area of a large number of consumers with a high purchasing power, the existence of various professional skills, as well as a superior infrastructure.

As FDI flows to take a positive role in generating economic growth, countries with emerging economies must have a workforce with a high level of training (in South Africa the expenditures for education represented 5.4% of GDP in 2012, in Brazil 5% of GDP, 3.9% of GDP in Russia and 3.1% of GDP in India)(CIA World Factbook, 2012), must have financial markets sufficiently developed and a high degree of trade liberalization, stimulating domestic demand due to the increase in labor productivity and wage growth so that their effect to materialize in the development of the business environment, to help the employment in receptacles countries of FDI. At the same time foreign companies and the greenfield investment in host countries will provide an adequate infrastructure and human resources, including the development of new technologies in these countries.

In the context of the economic difficulties faced by the Western countries, we can say that emerging economies are currently the main source of economic growth globally. However, the five countries of the BRICS group are put in difficulty by the unfavorable developments in inflation and unemployment that continues to have high values in spite of the economic favorable developments at the global level. The inflation rate in Russia increased by 1.7 percentage points in 2012 compared to 2010 reaching 8.4%. In South Africa the increase was by 0.5 percentage points in the same period, in Brazil with 1.7 percentage points declines it managed to obtain only India from 11.7% in 2010 to 8.9% in 2012 and China from 5% to 3.3%, owing to the slowed growth pace of the consumer prices. The unemployment rate reaches high values too, South Africa 24.9% in 2012, 9.8% in India, Russia 6.6%, Brazil 6% and China with 6.5%, increasing compared to 2010 when it was 4.3%.(CIA World Factbook, 2012)

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EU Funds and the Cohesion Policy

Elena-Daniela Onica¹

Abstract: There are some factors that influence the link between the effect of Structural funds on economic growth and the national characteristics of member states and/or recipient regions. The study tries to catch these aspects, also presenting an EU funds implementation model. Moreover, it reveals the evolution of the shares of cohesion policy in the EU budget, given that the aim of this policy is to stimulate the potential of endogenous development of EU regions and to reduce the social and economic disparities between them. The study briefly presents the conclusions of one of the most important documents drawn up by the European Commission, in this field up to present, emphasizing the strong and weak points identified in the financial perspective 2007-2013.

Keywords: structural funds; cohesion policy 2007 – 2013; economic growth

JEL Classification: F15; R11; R58, 047

1. Aspects Regarding the Influence of Structural Funds

In the academic literature, there are opinions according to which the success of the non-reimbursable assistance depends, on a large extend, on the national and regional characteristics of the beneficiary member states and/or regions. In this respect, Edeveen (2002) considers that the decisive factors of the EU funds efficient usage are government policy, social policy, institutional² framework and the openness of the economy. Fayolle and Lecuyer (2000) and De la Fuente (2002) considers that the EU funds efficiency is „relative limited” and it depends on the national affiliation of the beneficiaries and on the national specific features. Burnside and Dollar (2000) reveal that „*only states with sound domestic policies experience the positive effects of structural funds*”.

The EU funds implementation system is presented below:

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² The quality of the institutions is analyzed from the corruption perspective and the institutional organization is analyzed from the bureaucratic point of view.

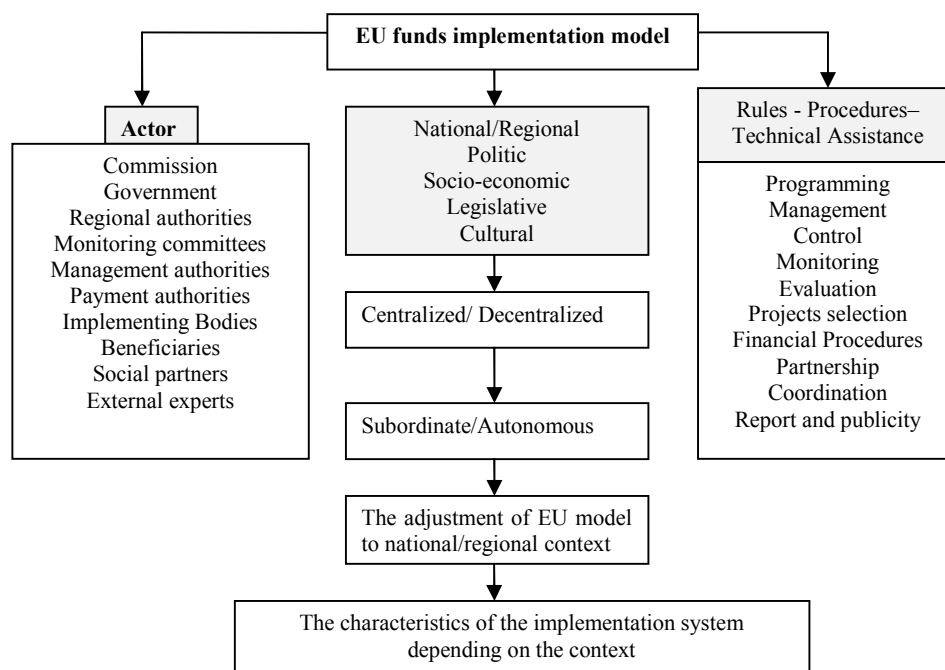


Figure 1. EU Funds Implementation System

Source: Adaptation by Todling-Schonhofer H. et al. (2003) – A Study of the Efficiency of the Implementation Methods for Structural Funds, Final Report, OIR in association with LRDP and IDOM, European Commission, DG Regional Policy

Ederveen, de Groot and Nahuis (2006) and also Baehr (2006) sustain that, at national level, the effect of EU structural funds on economic growth depends on the quality of the institutional system that exists in every state, being influenced by the openness of the economy, the inflation, the citizen's trust, corruption, etc.. In the paperwork „*How does sub-national autonomy affect the effectiveness of Structural Funds?*”, Baehr (2006) underlines that there is a high degree of interdependence between decentralization and effective use of structural funds, the increased local autonomy influences in a positive manner the effect of interventions, they also consider that the regional development policy should be addressed from „bottom to top”.

Gripaios et al. (2006) identified the problems that characterize the monitoring and evaluation process of the financial assistance, as follows: the lack of information, the lack of statistical databases and of common methods used at Community and inter-regional level as regards data collecting and interpreting, as well as overlapping of the national policies with the community ones and their contradictory actions. Gripaios proposes the financial assistance to be allocated in

regions with higher growth potential, considering that this approach will ensure long-term competitiveness of the European Union.

Analyzing the economic, social, legal and institutional framework evolutions, Ciupagea C. et. al (2006) reveals that in the new member states, the absorption of the structural funds in the first two year after enlargement had effects on investments, infrastructure, quality of human capital development, etc.. The different absorption capacity in the member states depended on every member state „personal” experience, acquired the pre-accession period. The study points out that *"positive lesson provided by Ireland and its strong upward path in the post-integration was not assimilated very well by the governments of the new member states"*. In conclusion, the success of the EU funds absorption depends on the preparation level of the country at the time of its accession and if it has learned the lessons during the pre-accession period. The same idea is shared by Oprescu G. et al. (2003) who believe that the effective use of structural funds is influenced by the impact of the financial assistance received during the pre-accession period.

2. EU Cohesion Policy

The main objective of cohesion policy is to reduce economic and social disparities as regards the levels of development of European regions. Thus, it is necessary that the less developed regions to remain in the spotlight of this policy. On the other hand, the most member states – together with the European Parliament – sustain that cohesion policy should cover the whole EU territory, given that it does not consists of a solidarity mechanism, but it aims at stimulating the potential of endogenous development of EU regions.

The share of the regional policy in the EU budget has increased over time: as shown in Table no. 1 below, in 1988 the share was 17% and since then, it slightly increased, so at the end of 2013 it is expected to reach 38%.

For financial framework 2007-2013, the total amount allocated to cohesion policy is EUR 308 billion (in 2004 prices) and for the new financial framework 2014-2020 the total proposed budget for the Cohesion Policy is EUR 376 billion (in 2011 prices), including the financial resources allocated to the new Connecting Europe Facility. However, the budget allocated to cohesion policy has not significantly increased despite of the increasing disparity of wealth in the enlarged EU.

Table 1. The Shares of Cohesion Policy in the EU Budget

Year	% in EU budget		EU budget as % GNI
	Cohesion Policy	Common Agriculture Policy	
1975	6,2	70,9	0,53
1980	11,0	68,6	0,80
1985	12,8	68,4	0,92
1988	17,2	60,7	1,12
1993	32,3	53,3	1,20
2000	34,8	44,5	1,07
2007	36,7	47,1	1,04
2013	38,1	43,0	0,93

Source: European Commission, *Community Budget: Situations shown in figures, 2000*, www.ena.lu

„Cohesion policy and regional policy are often considered synonymous, EU regional policy serving the purposes of cohesion policy”. (Constantin et al., 2007)

The Fourth Progress Report of the Commission to the European Parliament and the Council on economic and social cohesion identified a number of difficulties that member states and regions are facing and will have to face more often, respectively: globalization, demographic change and social tensions, climate change and the growth of energy price. Although, there is a consensus that cohesion policy should address these problems, most member states underlined that the cohesion policy can neither be the unique nor the main instrument of intervention. Some member states considered that these challenges are already being addressed through the Lisbon Agenda and the Göteborg Agenda, while others have noted that approaching these challenges should not place on secondary level the main objectives of cohesion policy established by the Treaty. Some member states asked the Commission to supplement the GDP per capita expressed in PPP - purchasing power standard - with other measures of wealth and living standards.

The conclusions of the Fifth Progress Report on economic, social and territorial cohesion: the future of cohesion policy states that "*cohesion policy contributes significantly to the widespread of growth and prosperity across the Union, reducing economic, social and territorial disparities (...) cohesion policy has created new jobs, increased human capital, led to the construction of infrastructure and improved environmental protection, especially in less developed regions. Undoubtedly, without cohesion, the disparities would be greater. However, the social effects of the crisis caused by the increasing demand for innovative global challenges and the need to make best use of every euro in public spending are necessary to achieve an ambitious reform of the reform*".

Therefore, the progress is needed in the following key areas: concentration of resources on the objectives of Europe 2020 Strategy, obtaining commitments of the member states relating to the implementation of reform and focusing on the results.

The explicit link between cohesion policy and Europe 2020 Strategy provides an opportunity to continue to support EU poorer regions, in order to reduce the gap between the regions, to facilitate coordination between EU policies and to transform the cohesion policy into a main engine of growth.

The added value of actual cohesion policy is intensely debated. Thus, some stakeholders state that it does not bind sufficiently to the EU priorities, it wastes the resources between different policy areas and that its impact is difficult to measure. The Commission approaches seriously these criticisms and it believes that, on the future, the cohesion policy should be focused on results, it should reduce the bureaucratic constraints and it should simplify its management.

Through the distribution of the financial resources, the cohesion policy has been aligned to the Lisbon Strategy. Further, it aims to align itself to Europe 2020 Strategy, approach that involves the following achievements:

- *Common Strategic Framework* adopted by the Commission, which may convey the Europe 2020 Strategy objectives into investment priorities and it includes all structural instruments, namely the Cohesion Fund, the European Regional Development Fund, the European Social Fund, the European Agricultural Fund for Rural Development and the European Fisheries Fund;
- *a partnership contract for development and investments*, which based on the Common Strategic Framework, which establishes the investment priorities, the allocation of EU and national resources between the domains and priority programmes, agreed conditions and the objectives that must be achieved. The contract will be the result of the negotiations between member states and the Commission related to the development strategy presented in their national reform programs. Also, it describes the coordination between EU funds and operational programs at national level;
- the *operational programmes*, as they are in the present, would represent the main instrument for managing the EU funds and they would transpose the strategic documents into investment priorities, accompanied by operational programs, along with clear and measurable objectives.

There are three proposals within EU budget review with significant impact on cohesion policy, respectively the concentration of the financial resources, the system regarding the conditionality and incentives and the focus on results.

Regarding the first element, the member states considers that in the future, it will be necessary the concentration of EU and national resources on a small number of

priorities, that can address the specific challenges they are facing. This objective can be achieved by establishing in the EU Regulation a list of thematic priorities linked to Europe 2020 Strategy. Member states and regions should focus on a certain number of priorities, depending on the value of EU financing. In the case of the member states and regions which receive less funding, they would be required to allocate the funds available for two or three priorities, while those which receive substantial funding, they can select more priorities. Some priorities should be mandatory. However, thematic concentration should not prevent member states and regions to finance innovative projects. The funds allocation in favor of some target groups (for example local development) should be considered, taking the form of local subsidies.

Analyzing the second element, namely strengthening the performances through conditionality and incentives, it is in connection with the microeconomic environment, with the macroeconomic policies and the EU economic framework (Onica, 2009). In order to support the economic government system, new provisions on conditionality should be introduced in order to create reform incentives. In this scenario, member states were required to undertake reforms in order to ensure efficient use of the financial resources in the domains link to the cohesion policy, for example the environmental protection, flexicurity policies, education, research and innovation.

For each priority area, the Commission should establish the key elements that the EU financing should follow. They should be adapted to national and regional contexts. The principles may be linked, for example, to the transposition of EU legislation, to finance some EU strategic projects and to the administrative capacity and institutional assessment.

On this basis, at the beginning of the programming period, it may be agreed specific conditions with each member state and region as regards the programming documents (for example, the partnership contract for development and investment and the operational programmes). Their achievement might be a prerequisite for the disbursement of funds under the cohesion policy at the beginning of the programming period or during the reexamination through which the Commission would assess the progress in implementing the agreed reforms.

So far, the application of sanctions and the financial incentives related to the cohesion fund was related to the Stability and Growth Pact. The Commission proposed to extend it to the rest of the EU budget, as additional leverage, in order to ensure the compliance of the macroeconomic conditions in the context of the corrective component of the Pact. Failure to comply with the rules laid down in the Pact, should create incentives through the suspension or cancellation of a part of the current or future funds allocated from the EU budget, without affecting the final

beneficiaries of EU funds. The cancelled financial resources would remain in the EU budget and they can eventually be distributed to member states.

In the EU extended economic governance, the principle of additionality should be reformed and linked to the EU economic surveillance process, based on the already established indicators of stability, which are presented to the Commission by the member states every year. The co-financing is one of the fundamental principles of the cohesion policy that ensures the policy is assumed by its actors on the ground. It is taken into consideration both the revision and its differentiation in order to reflect better the level of development, the European added value, the types of activity and the beneficiaries. In order to strengthen the effectiveness of the cohesion policy, it is taken into consideration the establishment of a performance reserve. That would be allocated, during a mid-term assessment of the multi-annual programming, to the member states and regions whose programmes have contributed the most to achieve the objectives of Europe 2020 Strategy compared to their point of departure.

Regarding the third element, namely the orientation toward results of the cohesion policy, I consider that there are necessary the monitoring and the evaluation systems of a higher quality and improved functioning. The starting point consists in establishing ex-ante objectives and measurable results indicators. The indicators should be clearly interpreted, statistically validated, directly linked to the applied policy, as well as quickly collected and published. I consider that the indicators and the objectives should be agreed within discussions on programming documents and they should be added to the basic indicators of each fund, valid for all operational programmes related to the Europe 2020 Strategy. Moreover, the annual reports must provide complete information about the indicators and the progress registered.

However, I consider that the ex-ante assessments should focus on improving the implementation of programmes, so that the tools and incentives can be monitored and evaluated during implementation. At the same time, the assessment should use methods according to the international standards, including the impact evaluation in an early stage to ensure data collection and dissemination. The obligatory character of drawing up these continuous assessments has as result to facilitate transparency in the EU. Also, the evaluations are envisaged from the moment the Commission certifies certain amounts of EU funds.

Finally, in order to provide an overall assessment, I consider that member states should draw up a report that summarizes the results of the continuous evaluations during the multi-annual financial programming period.

Although it is too early to draw up final conclusions about the effectiveness of the implementation of the Cohesion policy 2007-2013, is worth paying attention to aspects regarding the financial management.

The Commission must examine whether the non-granting of a reimbursement to national authorities prior to the payments from the EU contributions to the beneficiaries (in this case, the payment would be made from the national budget, in the first stage) would accelerate the payment of grants to the beneficiary and encourage a more strict national control of the funds. In the context of the current financial crisis, this aspect should not be neglected. The Commission takes into consideration the introduction of some elements based on results as regards the payment of EU contribution to the operational programmes or part of this programmes, depending on the type of action. As regards the financial perspective 2007-2013, the Commission considered the introduction of simplified reimbursement methods, such as standard scale for the unit costs and lump-sums grants. For the current financial perspective, the eligibility criteria of the expenses are set out at national level. There are opinions according to common rules should be adopted as regards the overheads in relation to different EU funds. In this respect, I personally consider that a harmonization of the eligibility rules for the structural funds can simplify the use of EU funds by the beneficiaries and the managing authorities.

The decommitment rule aims at ensuring the implementation of the projects in a reasonable time and also to encourage the sound financial management. Nevertheless, it can alter the behavior of the member states in focusing too much on a rapid absorption detrimental to the efficient use of the resources. The application of the decommitment rule was complicated by a number of derogations. It is necessary to ensure a balance between the quality of investments and quick implementation. For Romania, at least, I consider a good solution the application of $n+2/n+3$ rule, except for the first year, for operational programmes and removal of all derogations.

3. Conclusions

The study analyzes the benefits brought by the cohesion policy despite of the disparities regarding the economic development of the member states and/or recipient regions. It also reveals the opinions of the specialist in the field on the economic and social changes produced by the impact of the cohesion policy through the structural funds. The topic of this study is to present reflections on the future of cohesion policy, on the elements that can be revised, improved and maintained out of the existing ones for the financial perspective 2007-2013, as well as the elements that might be taken into consideration, analyzed and put in practice for the financial framework 2014 – 2020. Moreover, there are described personal opinions regarding the improvement of the instruments and incentives necessary for achievement the objectives of the cohesion policy.

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Economic Development, Technological Change, and Growth

Study on the European Welfare and Tax Systems Models Used to Support Economic Growth and Overcome the Effects of the Crisis

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Abstract: The article presents a theme of great interest for political parties, public administration representatives and researchers as each country tries to implement those policies that bring about economic growth. This study aims to determine the key role of taxation for achieving economic growth and to highlight to what extent the different fiscal levers can influence it. The main issues are the tax systems and policies adopted by the EU members for reaching an optimal yield from implementing their own tax rules. As a result, the paper underlines the best policies in relation to the identification of several tax systems that generate five models. The study of the correlations between the level of taxation, budget deficit and public debt, on the one hand, and the level of economic welfare, expressed by the economic growth rate, according to Eurostat statistics, on the other hand, enables us to establish the influence of public policies on the economic development. The case study represents a quantitative analysis of the variables that have an impact on economic growth, using empirical data on the performance of the EU countries for 2000 – 2012. The research offers a unique approach and the results prove the sustainability of the hypothesis.

Keywords: taxation; fiscal pressure; social welfare; budget deficit; public debt

JEL Classification: E62; H21; O11; O23

1. Introduction

In the recent years, the worldwide economy had to face a severe financial crisis, which was overcome through the implementation of different policies. Among the policies adopted, the fiscal ones had a key role. The EU tax system comprises

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different fiscal policies, each one of these showing specific features. The old member countries present a greater stability in terms of the effectiveness of the fiscal policies than the new member ones. Although the rate of economic growth for the last countries that joined EU had quite high levels until 2008, during the global economic crisis most of these countries have shown weaknesses. This situation led to a significant change in the level of some indicators, so that, the unemployment rate, for instance, has continuously risen. This was the result of the mass dismissals made to reduce budgetary expenditure and, thus, to reduce the enormous budget deficits, while the level of indebtedness grew significantly to cover certain expenses.

Taking into account the relevance of this theme, the article emphasizes, in the first part, the key role of the fiscal policies especially during the economic crisis periods and describes the fiscal policies models introduced in the specific literature in order to group the EU countries. The middle part deals with a comparative study between the welfare and tax system models regarding relevant macroeconomic indicators, i.e. the rates of economic growth, fiscal pressure, budget deficit and public debt. Finally, the last part resumes to some conclusions meant to underline the main results of the research, but also to provide a starting point for further investigation.

2. Literature Review and Research Methodology

Even if fiscal policy is a major issue, it is still very difficult to conceive that the economic growth of a country might be related just to the implementation of the optimal fiscal policy, since it is well-known that it is not enough to optimize a single domain. Optimization should address all the tasks of a state, which means that the fiscal levers should be supplemented by the monetary and credit measures, for instance (Inceu, et al., 2008, pp. 55 - 57). In fact, the decisions are related to the fiscal policy because the main revenues of a country are provided from taxes.

According to the specific literature, there were several models of European welfare regimes identified. One of the models was introduced in 1990 by Espring-Anderson, a Swedish sociologist, who considered that Europe has “three worlds of welfare”, namely: the Nordic welfare model, the Continental or Conservative model and the Liberal (Anglo-Saxon) welfare model (Sengoku, M., 2003). These models were reedited by Espring-Andersen in 2004 with the support of Stephens J. for the Scandinavian welfare model and Standing, G. for the CEE welfare model (Espring-Andersen, G. *et al.*, 2004, pp. 32-45, 225-270). While Espring-Anderson (1990) treats the welfare system among the Nordic, Anglo-Saxon and Western European countries, Ferrera M. (1996) and Bonoli (1997) studies were set on following Liebfried (1992) work on Latin Rim countries (Spain, Portugal, Italy, Greece and France). Ferrera’s study argues that there is a distinctive type of welfare model of the Southern countries, namely a Mediterranean welfare model

(e.g. study on Greek welfare system – Symeonidou, 1997; Italian welfare system – Trifiletti, 1998; Spain and welfare system – Guillen, 1997; Flaquer, 2000; Guillen & Alvarez, 2001). As a result of the fall of the communist block and the process of its integration, a new type of welfare model was born, i.e. the case of the states in Central and Eastern Europe. The post-communist welfare system has captured the attention of various specialists such as Standing (1996), Ferge, Z. (2001), Sengoku (2004), Diamond & Lodge (2013). By analysing the welfare system in these countries, distinctive features of each CEE state were identified (Fenger, 2007). Using a clustering analysis, the researcher argues that the states in CEE might be divided into three subgroups, which might define different welfare models: first, the model of the former-USSR which comprises Belarus, Estonia, Latvia, Lithuania, Russia and Ukraine welfare systems; second, the Post-communist Europe model associated with the welfare systems from Bulgaria, Croatia, Czech Republic, Hungary, Poland and Slovakia and the third type is the model characteristic for Georgia, Romania and Moldavia.

Regarding the national literature, Mara E. (2009, p. 50) distinguishes five different types of welfare models: the Nordic or Scandinavian model where we find Denmark (DK), Finland (FI) and Sweden (SE), the Continental or Western model which includes France (FR), Germany (DE), Belgium (BE), Netherlands (NL), Austria (AT) and Luxemburg (LU), the Mediterranean or Southern model applied by Italy (IT), Greece (EL), Cyprus (CY), Spain (ES) and Portugal (PT), the Eastern or CEE model belonging to a group of ten European countries - Czech Republic (CZ), Slovakia (SK), Poland (PL), Hungary (HU), Romania (RO), Slovenia (SI), Bulgaria (BG), Lithuania (LT), Latvia (LV) and Estonia (EE) - and the Liberal or Anglo-Saxon model specific to Great Britain (UK) and Ireland (IE). Following these taxonomy, our study intends to emphasize which welfare model is the best alternative to sustain economy. We compared them by taking into account the evolution and correlation of the four variables mentioned in the previous section.

3. The Role of Fiscal Policy in the Context of the Economic Crisis

Even though taxes did not influence directly the financial crisis, some aspects of the tax system had a certain impact on raising the risk assumed and the degree of indebtedness of banks, households and companies. In November 2008, European Commission has developed a European Economic Recovery Plan, which included a mix of fiscal and budget measures, which had the purpose to provide support for the economy and to inspire confidence. It was introduced tax incentives worth 200 billion euros, divided between the European Commission (30 billion) and Member States (170 billion). A set of mechanisms were proposed to all the EU members from which they could choose the ones they found suitable (Hemmelgarn & Nicodeme, 2010). Therefore, EU countries had to implement severe fiscal

measures to combat the crisis and to rehabilitate their economic background (e.g. a great majority of states had to cut taxes, while others had to increase taxation).

Table 1. Fiscal Measures Taken by the EU Member Countries

<i>Types of taxes</i>	<i>Countries where taxation was reduced</i>	<i>Countries where taxation was increased</i>
Personal income tax	AT, DK, FI, FR, DE, HU, LV, LT, LU, MT, NL, PL, PT, SI, SK, SE	EL, IE, UK
Social contributions of the employer	CZ, FI, HU, NL, SE	IE, RO, UK
Social contributions of the employee	CZ, NL, SE, SK	LT, RO, UK
Capital gains	RO	IE
Taxes on wealth and inheritance	EL, ES, IT, LU, PT	
Environmental taxes	DE, NL, RO	FI, IT, LV, LT, SI, UK
Tax profit	EL, LU, PT, SE	IT, LT
The standard rate of VAT	UK	HU, IE, LV, LT
The reduced rate of VAT	BE, CY, CZ, FI, FR, MT, RO	HU, EE, IE, LV, LT

Source: European Commission, Taxation Trends in the European Union, 2009

The fiscal policies focused on reducing taxation on labour and, particularly, on bringing the personal income tax rate. UK was the only EU member that had temporarily reduced the standard rate of VAT. In order to stabilise the financial markets, it was taken into account the introduction of a tax on financial transactions, whose purpose (Hemmelgarn & Nicodeme, 2010) was to solve problems such as the stabilisation of the financial markets by reducing the speculative trade and by increasing the cost of transactions on the derivatives market. Each country tried to minimize the effects of the crisis and return to an upward trend. The most developed states have successfully fulfilled the role of world leaders, managing by their own forces to overcome the crisis. In addition, they were able to provide financial and technical support to the less developed countries, which were seriously affected because their economies were strongly imbalanced. Although on an upward trend, many Southern and Eastern countries, including RO, have failed for a long time to record a real economic growth.

4. Fiscal Policy Models in Ensuring Economic Growth in the EU

The EU's fiscal policy is not a common policy for the member states. It is a system that encompasses all policies and coordinates them in order to achieve better compatibility of taxes, for a proper functioning of the common market. EU tax policy is in fact a process of coordination of all the fiscal policies of the members,

in which each country retains its sovereignty and may adopt similar tax structures mostly from those countries that are defined by similar features.

4.1. The Nordic Model

This pattern is specific to the Scandinavians and is considered to be one of the models that develop the highest degree of social welfare, ensuring a high rate of employment. The public sector is strongly involved in financing those social and economic activities which provide certain benefits and increase social welfare. A specific feature of this model are the high fiscal pressure rate and the fact that social decisions are not defined by laws, but are laid down by collective agreements. That is why in these countries there is no national minimum wage, each union setting its own rules. The model also uses a dual tax system, introduced in the mid-80's, which provides for the income a mixed progressive taxation. This tax system brings about a considerable expansion of the tax base and ensures neutrality of income taxation from capital. Thus, it avoids migration of capital.

4.2. The Continental Model

Many features of this model are similar to those of the Nordic one. For instance, as a result of the help offered to the unemployed (financial support, social care), the level of poverty is low. The fiscal pressure is quite high, but is still below the level described for the Nordic model. A positive effect of introducing high taxes on social care is that it forced businesses to focus on enhancing productivity in order to compensate the cuts in the number of employers. A less favourable measure was that of reducing the retirement age and offer unjustified benefits to the unemployed as their number increased exponentially (Guillemard, 2001).

4.3. The Mediterranean Model

Unlike other models, the Mediterranean one focuses on the social security system in respect of pensions. Although this model is mainly applied by developed countries of the Mediterranean basin, it faces a higher degree of poverty than the previous two, which brings about major differences between social classes. Taking into account only the pension system, the social protection is neglected and the expenses for this area are at the lowest level in comparison with the models discussed so far. At the same time, these countries are characterised by an inefficient public sector (Mara, 2009, p. 51).

4.4. The Eastern Model

This new model includes states in transition, with an average degree of economic development. Their main goal is to catch up the Western developed countries and to raise the level of social welfare, through the policies implemented. It is considered to have appeared in 2004 when former Communist states joined EU. This pattern also includes the Baltic States and, of course, RO and BG. Fiscal

pressure is relatively low in these countries, mainly due to the adoption of the flat tax, which is considered to have created major gaps between the lower and middle class and those who obtain high wages and profits. In fact, the Eastern model is characterized by a low level of effectiveness in terms of social protection, even if contributions are quite high. Specific to these countries is the strong economic growth recorded after joining the EU, until the beginning of the crisis.

4.5. The Anglo-Saxon Model

This last pattern presents unique characteristics as compared to the others. First of all, the degree of social welfare does not reach the same level as in the case of the Nordic model or the Continental model. The poverty level is still quite high and that is why the imbalance between fairness and efficiency is a matter of concern. It is one of the oldest models, which appeared in 1973, and is usually associated with England, New Wales, Scotland and Ireland. It is characterized by low unemployment rates and low amounts of public resources paid for social care.

5. Welfare and Tax System Models Analysis

This chapter reflects the dynamics of the economic growth rate, fiscal pressure rate, budget deficit and public debt using the five patterns previously described. The values were established as an average of the countries that are included in each particular model. We also included in the chart the EU average (the red line). We retrieved the primary data from Eurostat and adapted it for the current research.

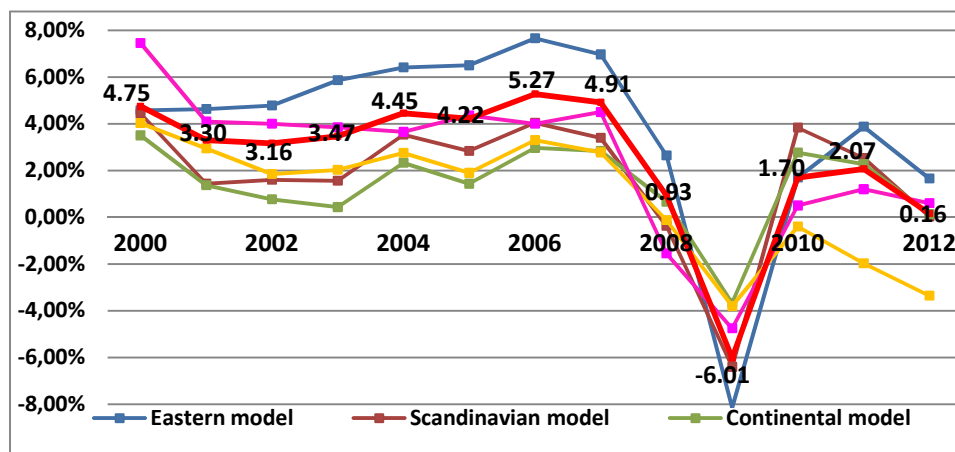


Figure 1. Dynamics of the Economic Growth Rate in EU, 2000–2012

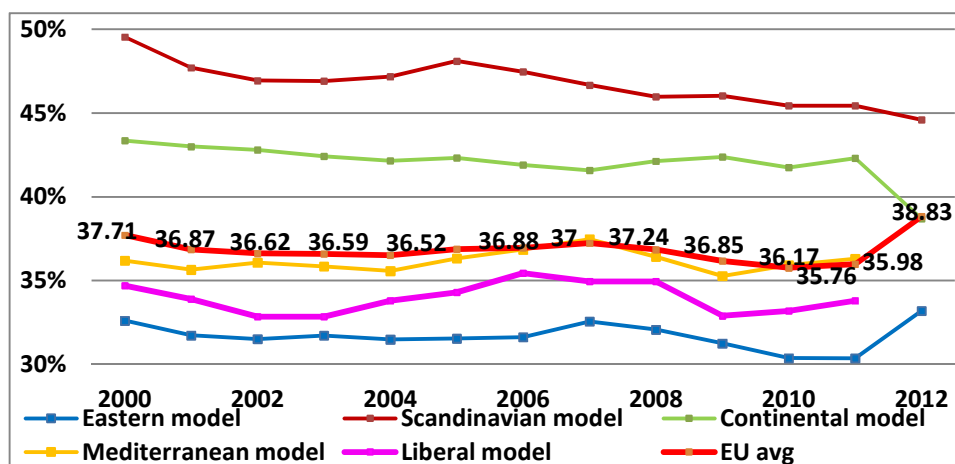


Figure 2. The Evolution of the Fiscal Pressure Rate (% of GDP) in EU, 2000-2012

Figure 1 shows that, for the Eastern model, the indicator presents severe variations: the highest economic growth rate until 2008 and the lowest rate during the crisis as compared to the other models, proving that these states are weak when economic fluctuations occur. According to figure 2, the highest average fiscal pressure rate is recorded among the Scandinavian countries (49.35% DK and 48.88% SE), followed by the countries belonging to the Continental model (Belgium – 48.85%; France – 44.4% and Germany – 40.57%), while those with lower fiscal pressure are the new EU members. The Mediterranean model’s fiscal pressure rate is at a lower level than in the other two models, the average value being of 36.55% of GDP. However, these countries are recognised for their high level of tax evasion, because citizens are not willing to pay taxes and fees. The two countries belonging to the Liberal pattern have low fiscal pressure. Ireland uses a share of profit tax of only 12.5% and experienced, lately, high degrees of economic growth to catch up with the other developed countries. In addition, this country is also characterized by a very low tax evasion rate, of about 13% of GDP (Mara, 2009, p. 52).

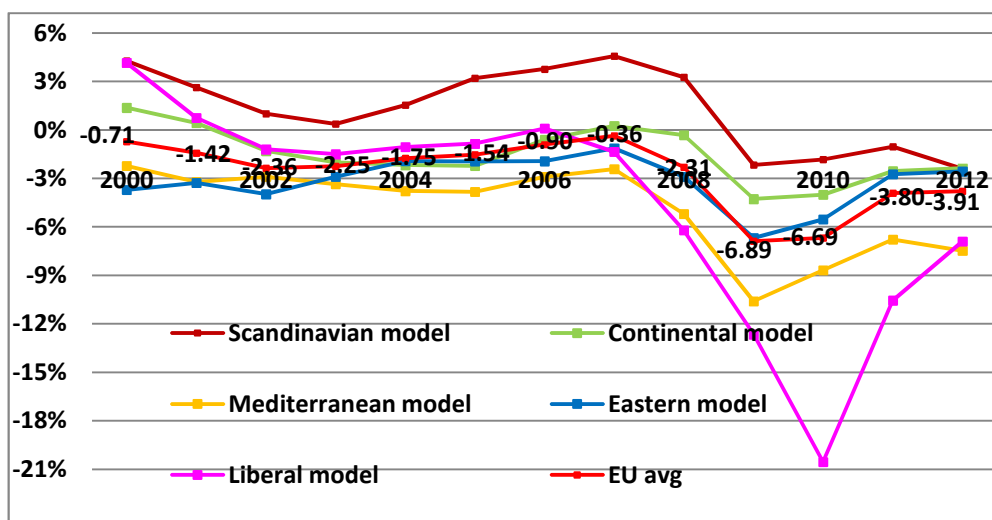


Figure 3. The Evolution of the Budget Deficit (% of GDP) in EU, 2000–2012

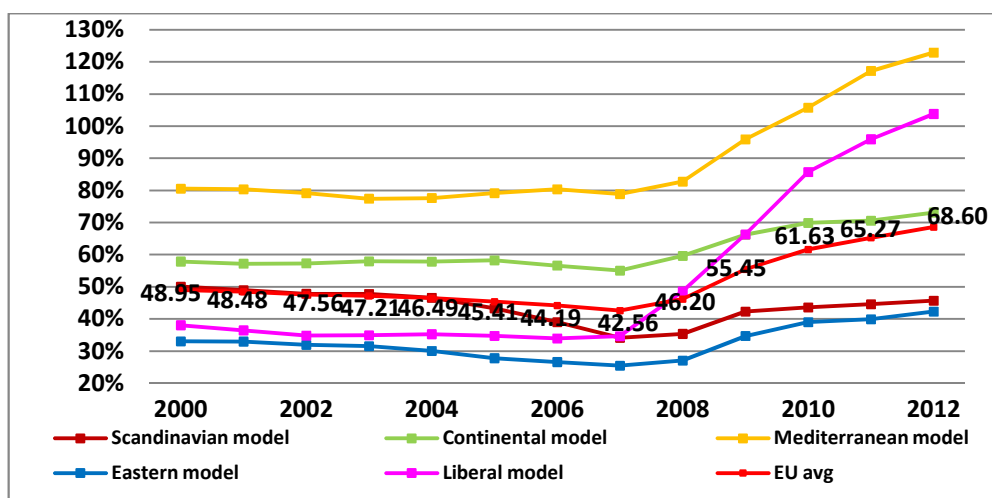


Figure 4. The Evolution of the Public Debt (% of GDP) in EU, 2000 - 2012

We observe in figure 3 two totally different evolutions. Firstly, the Nordic states have budget surpluses and not deficits as most of the other groups, for 2000 – 2009. The drop recorded in 2009 is insignificant (-2.8% in FI, -2.1% in SE and -2% in DK) as compared to the other evolutions. Secondly, we observe the serious public deficit of the Mediterranean and Liberal models recorded since 2008, e. g. for the Liberal countries, 2010 was the worst year in terms of budget revenues collection: UK recorded a negative result of 10.2% of GDP, while IE had an excessive budget deficit of over 30%. The Continental model is comparable to the

Nordic one, the average values of the public deficits for 2000-2012 being relatively close to zero: -0.97% in BE, -2.11% in DE, -3.34% in FR and +1.89% in LU.

Regarding the public debt evolution, the Northern countries did not borrow money excessively as the share of public debts in GDP never reached over 50%. Surprisingly, the Eastern group had a constant evolution regarding both indicators: the budget deficit followed the average EU trend, while the public debt was the lowest of all economies. Still, HU and PL had higher shares, with averages of 62.54% for HU and 44.81% for PL. The Southern countries were severely affected by the crisis so that their degree of indebtedness, which was very high even before the crash (about 80% of GDP), grew to 120% in 2012. It is the case of EL, IT, PT.

6. Correlation Analysis

From the general presentation of the models, we have concluded that the Nordic and Continental patterns are the most efficient as they offer a comfortable standard of living, even though taxation is at a high level. To verify this hypothesis, we measured an important indicator, whose purpose is to diagnose the intensity of the bond between the public indicators presented before and the economic development of each model.

Table 2. The Correlation Coefficient between the Public Variables and Economic Growth

<i>The fiscal policy welfare model</i>	<i>Fiscal pressure – economic growth</i>	<i>Budget outcome – economic growth</i>	<i>Public debt – economic growth</i>
Scandinavian	0.417838	0.498932	0.108498
Continental	0.135109	0.518735	- 0.285236
Mediterranean	0.365256	0.927278	- 0.753471
Eastern	0.162112	0.832683	- 0.459607
Anglo-Saxon	0.321504	0.758087	- 0.572261

Source: Own Interpretation after Eurostat Databases

The strongest bond between fiscal pressure and economic growth is observed for the Nordic model. This means that an increasing taxation was reflected in the evolution in the same direction of the economic growth rate. The same positive correlations are seen for all the other models. Still, we notice the insignificant values of 0.14 for the Western countries and 0.16 for the Eastern states, values that prove that the fiscal pressure rate is not one of the most noticeable influences. The strongest and the weakest correlations are presented in the scatter charts.

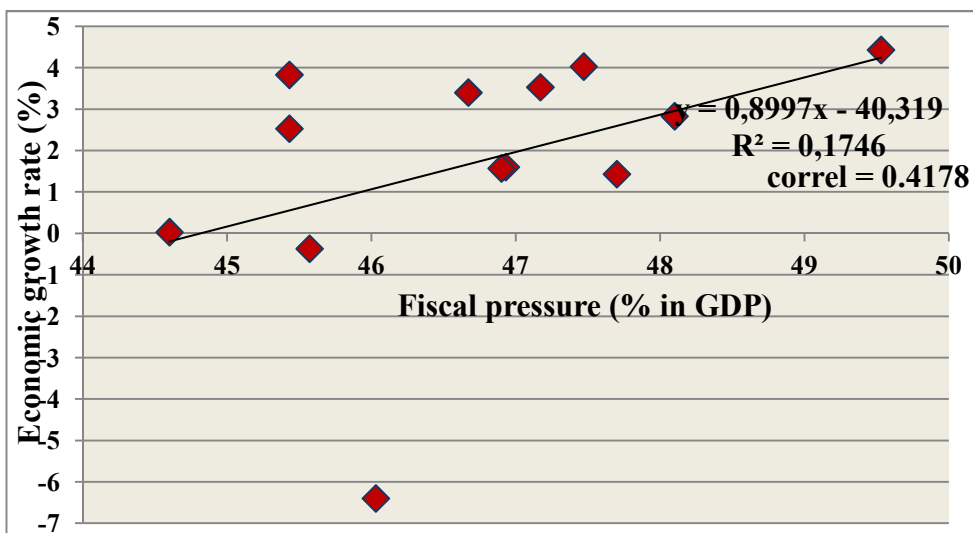


Figure 5. The correlation between the fiscal pressure and economic growth for the Nordic model, 2000–2012

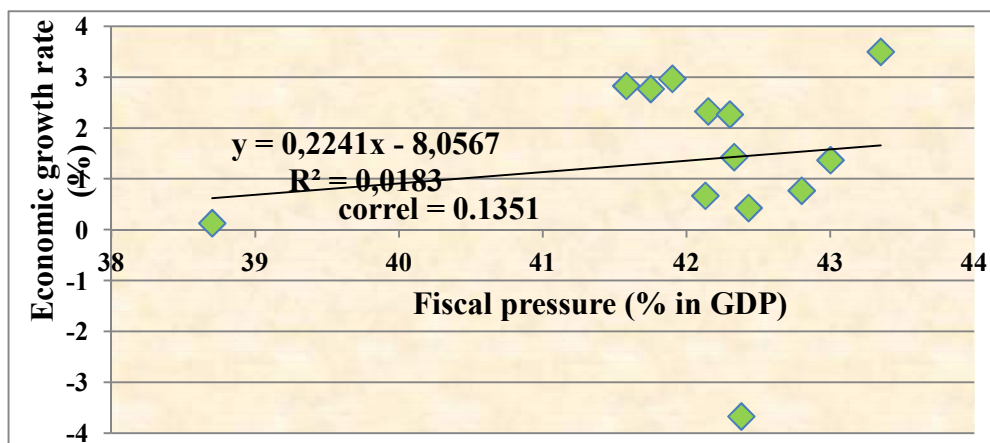


Figure 6. The correlation between the fiscal pressure and economic growth for the Continental model, 2000–2012

In the left figure, the slope has a value of 0.8997, while, in the other graphic, the value is only of 0.2241, so that, the trend line is almost parallel to the abscissa. As a consequence, figure 6 shows the existence of a poor cause-effect relationship: an increase in fiscal pressure by 0.22% is accompanied by an increase in the rate of economic growth by 1%. The weak correlation between fiscal pressure and

economic growth rates for the states included into the Continental model can be also seen from R^2 coefficient which is only 1.8%. In fact, it shows that there are other factors with a higher influence on economic development. Therefore, in addition to public revenues, these countries have to attract other resources, maintain an efficient management of costs and a favourable foreign trade balance.

The deficit or, in some cases, the surplus of the budget are also positively correlated to the economic growth rate. In other words, if the absolute value of the deficit decreases, the economic growth rate goes up. The same happens when the rate of the surplus in GDP increases. The connection established between these indicators is obviously stronger than any other. The coefficients are between 0.50 for the Nordic model and 0.93 for the Southern model. All the other group of countries have significant correlation bonds. In order to reach a sustainable economic growth and overcome as efficiently as possible the effects of the crisis, countries like EL, PT, ES should have been very careful regarding the revenues-expenditures ratio. In their case, the slope is 0.89 and R^2 is 83.83%, which prove that the deficit recorded by the Southern states (especially by EL who had a threatening deficit of 15.6% in 2009) has a major impact on their performances.

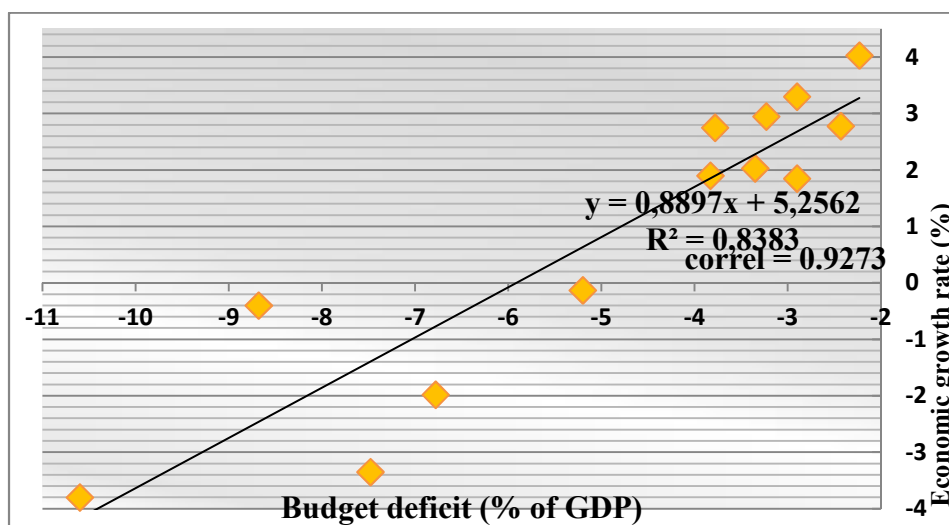


Figure 7. The correlation between the budget outcome and economic growth for the Mediterranean model, 2000–2012

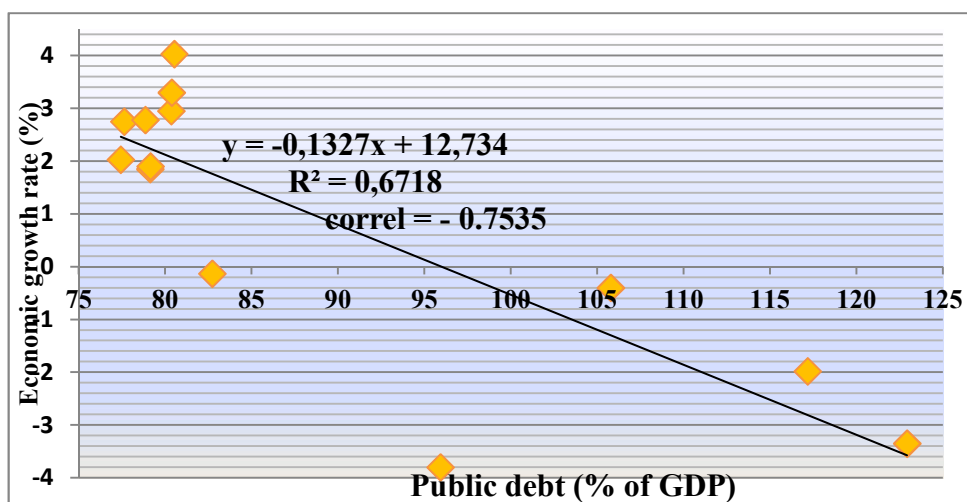


Figure 8. The correlation between the public debt and economic growth for the Mediterranean model, 2000–2012

Public debt and economic growth present a negative correlation for all countries, except for the Nordic ones. For the latter welfare models, the connection between the degree of indebtedness and the economic evolution is positive and extremely weak. Such a situation makes us expect that these countries might borrow money with no constraint because loans do not seem to have an unfavourable effect on economic performance. However, for the other four models, the correlation is stronger and negative. As figure 8 above shows, the same group of states, as for the deficit analysis, present the strongest bond. The Mediterranean countries have a strong negative correlation coefficient of over 75%. A decrease of the public debt by 0.13% will be accompanied by an increase in the rate of economic growth by 1%. Therefore, following the budget deficit, public debt has its own high degree of influence on economic growth, and any change in the level of indebtedness can positively or negatively influence the level of economic growth.

All in all, the correlations emphasized several important trends for 2000–2012. For the Liberal model countries, fiscal pressure and even public debt did not seem to have a major impact on economic growth. Still, these variables produce stronger effects and become a matter of concern during economic crisis. If the coefficient was 0.32 for the fiscal pressure and -0.57 for public debt, the correlation between fiscal pressure and economic growth for 2009 – 2012 becomes 0.82, while the public debt exerts an influence of + 89.50%. So, the fiscal measures implemented contributed to combat the economic drop and, even more, the amounts of money borrowed proved to have been efficiently used by the governments to sustain different economic programmes. The similar strong correlation characterizes also

the CEE countries, whose increasing debt level had the same influences. The index of -0.46 , for the years before 2009, became $+0.86$ for the last years analysed.

7. Conclusion

The analysis highlighted that each welfare model has its peculiarities and that each indicator has a different evolution from one model to another. However, the strongest correlation for nearly all models was the one involving the budget deficit and the rate of economic growth. In order to reach balance in terms of economic development, a single fiscal, economic and social development rule should be implemented at EU level. This is unreachable, because each state (in particular those developed) wants to satisfy its own interests and not those of all EU citizens. Instead, the less developed countries, such as RO, hope to achieve in the future an economic and social convergence and harmonization to increase the standard of living and to provide a prosperous and stable economic climate for all citizens.

The way the optimization process of tax systems should be done raises big question marks for all those responsible. On the one hand, this optimization becomes necessary because the introduction of new taxes usually brings about changes of different nature. On the other hand, for achieving the desired goals by the Government and other institutions alike, all those responsible should identify and apply the most suitable taxation.

Being aware of the importance of the theme, we consider necessary to continue the analysis by highlighting the viable solutions for the Eastern countries and, in particular, for RO. The correlations shown in this paper cover a period of thirteen years, both the years of economic boom, as well as those affected by the crisis. This paper provides a starting point for future studies and can be improved by including in the model other economic indicators (not just the budgetary-fiscal ones) that might exert some influence on economic growth.

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Examining Financial Leverage, Profitability and Firm Life Influencing Nonfinancial Information Disclosure Quality

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Abstract: Modern accounting emphasizes on nonfinancial measures as a device to compensate the financial measures' weakness and the financial measures are recommended to be used with nonfinancial ones. This study is to examine the factors influencing the nonfinancial information disclosure quality in the firms listed in Tehran stock exchange. So the necessary information were gathered from 102 firms listed in Tehran stock exchange in 2008–2012. The regression analysis was used to test the hypotheses. A model including 50 indexes based on Iran accounting standards and other regulations concerning disclosure were used to measure nonfinancial information disclosure quality. The findings indicate firm life and profitability have positive and significant effect on nonfinancial information disclosure quality and financial leverage has negative and significant effect on it.

Keywords: nonfinancial information disclosure; financial leverage; profitability; firm life

JEL Classification: F36

1. Introduction

One of the economic development factors in developing countries is to have an information system. The information give intelligence and knowledge, create motives and decrease uncertainty, reveal the information concerning new choices

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or eliminate the weak ones and finally influence people and motivate them to do something. The information should send signals warn and inform about future especially in business and commerce space before it would be too late (Eccles and Mavrinac, 1995). One of the purposes of the information system is to prepare and present information to create a basis for the investors and grantors to take logic decisions; in line with this the information should be useful, related and be able to influence people's economic decisions and lead to the best decisions; on the other hand, it is necessary financial and nonfinancial information be disclosed and available to everybody so the financial information are useful for the mentioned groups, accounting purposes and financial reporting (Gray et al., 1996). Nowadays there is unanimity among the researchers that the company's real values are not shown in old financial statements. It is reasoned that it is necessary to focus on nonfinancial information in yearly reports to decrease the problem (Flostrand and Strom, 2006). Nonfinancial disclosure means the presentation of all qualitative and quantitative nonfinancial information issued through the descriptive notes with financial statements and directors' board report. New literature focuses on nonfinancial measures as a device to compensate financial measures' weakness and recommends the usage of the nonfinancial measures beside the financial ones. Thus, these measures may be informer and guide to take current decisions without imposing additional costs on the firm (Sajadi et al. 2009). It seems necessary to examine and know factors influencing the companies' nonfinancial disclosure quality.

It is possible to consider the financial and nonfinancial information disclosure as the assessment of firm operation, judgment about how the firm uses available sources and foreseeing the firm profitability process. So information disclosure should be related, appropriate and complete. By virtue of above mentioned matters concerning the study subject it is indicated that the information disclosure is not limited to a special category of the financial statements beneficiaries, but in includes a vast spectrum of the community such as professional circles, grantors, legislating groups and accounting standards compilers; also lack of enough studies in this field may be another factor indicating the importance of this study. So the study purposes are briefly as follows:

Studying the quality of nonfinancial information disclosure in the producing firms listed in Tehran stock exchange.

Knowing the factors influencing the quality of nonfinancial information disclosure and how they influence in the producing firms listed in Tehran stock exchange.

2. Literature Review

Simply disclosure means the transfer of economic information including financial, nonfinancial, quantitative or other forms in relation to the company's financial conditions and operation. If the disclosure is obligatory by virtue of some regulations and laws, it is obligatory and if it is not by virtue of some regulations, it is optional. Also implicitly it indicates the least information disclosure by which it is possible to have acceptable assessment about the risks and relative value of the firm to help the information users (Ansah, 1997).

Complete disclosure requires for the financial statements to be programmed and prepared to present a more precise image of the economic occurrences effective in a defined period and it includes the information useful for the investors and it should not mislead the reader. More evident complete disclosure principle means not to eliminate or hide any information important for or interested by the investors (Belkaoui and Kahl, 1978).

Having examined the analysers' report it was indicated that they have benefited from nonfinancial information to assess the company's future operation (Flostrand and Strom, 2006). Generally these studies have indicated that nonfinancial information have relationship value and influence greatly the beneficiaries' judgements and decisions to benefit from the financial statements. Shan (2009) has examined the level of the nonfinancial information benefited by the experts and concluded that the nonfinancial information influence the assessments about shares price. Briefly there are many reasons to promote the nonfinancial information disclosure quality and there are many evidences to recommend the advantages of such disclosures.

In this section we examine the factors effective on information disclosure quality and predictions of agency and signaling theories; the factors include profitability, financial leverage and firm life:

Agency theory predicts that there is a positive relation between profitability and information disclosure. The profitable firms are exposed to more precise examinations so they disclose more information in line with continuous position of the firm profitability (Ng and Koh, 1994). Also signaling theory predicts that the profitable firms disclose more information to signal the strong financial position to the investors (Watson et al., 2002).

Financial leverage describes the companies' financial structure and reveals the equilibrium between two long-term finance sources (The amounts invested by shareholders and creditors) (Watson et al., 2002). Agency theory predicts that there is a positive relation between financial leverage and information disclosure (Jensen and Meckling, 1976). When the firms borrow the difference between directors and creditors increases the control costs so the firms disclose more information to

convince the shareholders and creditors in order to decrease the control costs (Healy and Palepu, 2001). Signaling theory predicts the relation between disclosure and financial leverage is possible though the relation direction is not clear (Watson et al., 2002). Leventis and Weetman (2004) showed that the financial leverage is not an important variable in firms listed in Mexico and Athena stock exchange. Hossain et al. (1995) confirmed the agency theory prediction in relation to positive relation between disclosure and financial leverage.

The obligatory and optional disclosure level may be in relation to the firm life; the relation has been examined by different researchers who concluded different results. Owusu-Ansah (1997) showed that there is a significant relation between the disclosure level and firm life while Haniffa and Cooke (2002) and Al-Shammari (2008) found no relation between them. Signaling theory predicts that the older firms have a higher organized system so they disclose more information in the yearly reports to keep their reputation and validity and present a better image to the capital market (Akhtaruddin, 2005).

Notwithstanding all emphases on promoting nonfinancial reporting some serious obstacles influence new forms of companies' disclosure; the obstacles are as follows (Taylor et al., 2010):

1. *Lack of comparable data*: Nonfinancial disclosures are low comparable because they are quantitative;
2. *Lack of reliable and clear data*: The voluntary disclosure reliability may be questionable when there are no clear regulations or effective auditing system to support nonfinancial reports;
3. *Time and sources limits*: The investors encounter with limits in relation to time and sources to analyze the firm data. More information disclosure especially if they have no clear relation with investment decisions creates serious problems. The information should be available, attainable and reliable to protect efficient market.

In this section some expressions used in the study are described:

- *Disclosure*: Presenting information by methods and channels other than identifying or registering the events in financial statements differing from identifying in financial statements and this aspect of the information which is very interested (SFAC No. 5);
- *Nonfinancial disclosure*: The foresightful information including management programs, opportunities, risks and focus on factors emphasizing on long-term value creation and presenting the information to adapt better the information reported to outer users with the information reported to directors' board in order to manage better the commercial processes (AICPA, 1994);

- *Obligatory disclosure*: Some aspects on information reported because of some governmental regulations, laws and contracts, capital market and professional accounting institutions reported through financial statements (Ansah, 1997);
- *Optional disclosure*: Presenting information additional to the obligatory ones when first selected by the firm management and secondly influenced by no force legally or by capital market pressures, analyzers, etc. (Meek et al., 1995).

3. Hypotheses Development

H1: The firm financial leverage has significant effect on the disclosure quality of nonfinancial information.

There is a vast view hypothesizing the firms with high debts are obliged to disclose more information to satisfy their creditors. The firms with bigger financial leverage are potentially exposed to more agency costs; thus, one may suppose there is a direct relation between financial leverage and disclosure quality (Murcia, 2010). Also by virtue of Zarzeski's (1996) study the firms with higher debts disclose probably more information to their creditors. Also Belkaoui and Kahl (1978), Malone et al. (1993), Deumes and Knechel (2008), Taylor et al. (2010), Elshandidy et al. (2011) showed that financial leverage is a positive and effective factor on the quality of information disclosure.

Ferguson et al. (2002) concluded that there is a positive relation between the financial leverage and the disclosure quality of information. Also Lau et al. (2009) stated that the firms with vaster disclosure use the debts other than shares issue to do their operations.

Although many studies have indicated there is a positive relation between the financial leverage and the disclosure quality of information there are still some ambiguities in relation to the two variables; for example, Chow and Wong-Borne (1987), Wallace et al. (1994), Camfferman and Cooke (2002) and Rajab and Schachler (2009) found no relation between them.

H2: Firm profitability has significant effect on the disclosure quality of nonofficial information.

By virtue of agency theory the firms with high profitability benefit from the company's issued information for their personal profits; they try to hold and continue their professional position and increase their receivable rewards through disclosing more financial information. On the other hand, by virtue of signaling theory the firms owners are interested in presenting 'Good News' to capital market to prevent their shares value fall (Watson et al., 2002). In view of political economy the firms try to correct the profit level by disclosing more information.

Singhvi and Desai (1971) stated that more profit makes directors disclose more information to describe their potency and role in maximizing shareholders' wealth. Also high profitable firms may be proud of this result and wish to disclose more information for people to increase their positive operation effect; on the contrary, the directors experiencing low profitable firms may experience a feel of danger and limit information disclosure to hide somehow their company's weak operation.

Leventis and Weetman (2004) concluded that the high profitable firms are more vulnerable to legislator's intervention so they disclose more information in their yearly reports to justify the financial operations and decrease political costs.

Some researchers have presented different view; for example, Lang and Lundholm (1996) do not believe in any defined relation between profitability and information disclosure limits but believe that this relation usually has no defined direction. The findings of McNally et al. (1982) are not in accord with Lang's and Lundholm's; they showed that there is no significant relation between the quality of information disclosure and companies' profitability in New Zealand. Wallace et al. (1994) found no significant relation between the two variables.

Camfferman and Cooke (2002) had unforeseeable findings from their study; their findings showed that there is a negative and significant relation between English companies' profit margin and the quality of the information disclosure.

Vandemele et al. (2009) concluded that there is a negative relation between profitability and on the quality of the information disclosure.

H3: The firm life has significant effect on the quality of the nonfinancial information disclosure.

Firm life is one of the new variables proposed by Camfferman and Cooke (2002) and Akhtaruddin (2005) and its relation is examined with information disclosure quality. It is supposed that the firm life may play an important role in defining the information disclosure quality. Older firms try to disclose more information to keep their reputation and fame.

4. Study History

Some of the studies executed in developed and less developed countries are summarized as follows:

- Richard et al. (2003) examined the relationship value of nonfinancial operation standards and accounting information between ten superior airlines firms in airplane industry in U.S.A. in 1988–1999; in the study profit and unusual changes in it were used as the representative for accounting information; the findings show that profit, unusual changes in it and nonfinancial disclosures have significant

relation with the companies' shares yield. Also the findings indicated that the nonfinancial disclosures have increasing effect on the relationship value of accounting information;

- By regression analysis Vanstraelen et al. (2003) examined the quality of nonfinancial disclosures quality and financial analyzers' potency to predict between the producing firms listed in three European countries' (Germany, Netherland and Belgium) stock exchange in 1999; their findings indicated that the nonfinancial information disclosure quality has positive and significant relation with companies' size. Also more foresightful nonfinancial information disclosure is with less information asymmetry and higher precision by the analyzers in predicting companies' profitability;
- Al-Saeed (2006) studied the relation between companies' features and the information disclosure rate in financial statements of the firms listed in Saudi Arabia stock exchange in 2003 so he defined 20 disclosure indexes by virtue of previous studies and assessed the sample of 40 firms according to non-weight index method. His findings indicated that the information disclosure rate average is less than the possible points medium rate. Also the firm size who was measured by total assets logarithm had positive and significant relation with information disclosure rate while unexpectedly the debt ratio, possession dispersion, firm age, profit marginal, industry type and auditing firm size had no relation with the information disclosure rates in the financial statements;
- Dorestani (2009) examined the relation of nonfinancial information disclosure with accounting and market operations, profit quality standards and analyzers' prediction in the firms listed in NYSE stock exchange by virtue of regression analysis; the findings indicated no relation between above variables with nonfinancial information disclosure;
- Arvidsson (2011) examined the nonfinancial information disclosure rate in yearly reports of the firms listed in Stockholm stock exchange in 2008; the study indicated that the rate of attention and concentration on nonfinancial information related to intangible assets were interested in yearly disclosures. This attention increase was evident in both compiled laws and demands rate.

The management team should not only present tangible assets in yearly reports but also show the role played in the process creating companies' value and strategy by intangible assets. Besides, the study indicated the process change in the companies' yearly reports towards the presentation of the information related to the created companies' social responsibilities, studies and development. The study findings indicated that if nonfinancial information is disclosed properly, the financial statements weakness and inefficiency are compensated and if they are not disclosed, perhaps it would be a risk damaging efficient allocation of the sources in the shares market.

5. Study Method

Regression model designed to test the firm features influencing nonfinancial information disclosure quality is as follows:

$$DISC = \alpha + \beta_1(LEV) + \beta_2(PRF) + \beta_3(AGE) + \varepsilon$$

The study variables and their measurement method are shown in following table.

Table 1. Independent Variables, Dependent Variables, Measurement Method and Symbols Incorporated into the Model

row	variables	measurement method	symbol incorporated into the model
1	the rate of nonfinancial disclosure	issuing checklist	Disc
2	financial leverage	dividing total debts by total assets	Lev
3	profitability	dividing net profit by total sale	Prf
4	firm life	the year when the firm listed in the stock exchange until March, 20, 2011	Age

6. Data Analysis

In this section mean statistics, middle, minimum, maximum and standard deviation of each variable is presented.

Table 2. Descriptive Statistics of the Study Variables

variables	Disc	Age	Lev	Prf
number	510	510	510	510
mean	43/59	14/33	0/61	0/15
middle	44/00	14/00	0/64	0/12
standard deviation	0/17	7/21	0/17	0/15
minimum	14/00	6/00	0/04	-0/22
maximum	72/00	43/00	0/99	0/99

Inferential Statistics: Testing the Effect of Firm Features on Nonfinancial Information Disclosure Quality

Table 3. Correlation of Firm Features and Nonfinancial Disclosure

		Disc	Age	Lev	Prf
Disc	Pearson correlation	1			
	significance number	- 510			
Age	Pearson correlation	0/328**	1		
	significance number	0/000 510	- 510		
Lev	Pearson correlation	-0/411**	-0/284**	1	
	significance number	0/000 510	0/000 510	- 510	
Prf	Pearson correlation	0/397**	0/113*	-0/195**	1
	significance number	0/000 510	0/011 510	0/000 510	- 510

Summarized Model Statistics Study

Table 4. Summarized Statistics of Study Model

independent variable	dependent variable	correlation coefficient	definition coefficient	estimated standard deviation	significance rate	Durbin – Watson
(a)	nonfinancial disclosure	0/670	0/449	0/075	0/000	1/852

Predictors: Fixed Variable, Firm Life, Profitability, Financial Leverage

By virtue of the findings from Table 4 the variables related to the firm feature have significant effect on nonfinancial information disclosure quality and by virtue of the correlation coefficient there is a positive and significant relation between the variables related to the firm feature and nonfinancial information disclosure quality; the coefficient definition is 0.449 namely the variables related to the firm feature may predict 0.449 of the dependent variable changes (nonfinancial information disclosure quality).

Testing significance of regression model (Test 'F'):

In this section the study's model significance is tested by variance analysis test as follows:

Table 5. ANOVA^b

regression equation	total squares	freedom grade	squares mean	statistic 'F'	significance rate
1 regression	2/369	6	0/395	68/401	0/000 (a)
remainders	2/904	503	0/006		
total	5/273	509			

(a) Predictors: Fixed variable, firm life, profitability, financial leverage.

(b) Dependent variable: Nonfinancial disclosure.

As you see in Table 5 considering the significance is less than 5 percent the regression model significance is accepted.

Testing significance of regression coefficients (Test 'T') and examining if there is collinearity.

Table 6. Test "T"

regression model	nonstandard coefficients		standard coefficient	statistic 'T'	significance rate	statistical collinearity	
	variables coefficient	standard deviation	Beta			Tolerance	VIF
fixed variable	0/341	0/040		8/598	0/000		
financial leverage	-0/083	0/014	-0/210	-5/826	0/000	0/845	1/183
profitability	0/137	0/016	0/293	8/405	0/000	0/901	1/110
firm life	0/002	0/000	0/154	4/354	0/000	0/872	1/147

As you see in Table 6 the profitability variable has the most effect and financial leverage has the least effect on the dependent variable (Nonfinancial information disclosure quality) in above model. Final equation of the study is stated as follows:

$$\text{DISC} = 0/341 - 0/083(\text{Lev}) + 0/137(\text{Prf}) + 0/002(\text{Age})$$

Defining regression model accuracy and examining the effect of the presented model:

It is necessary to examine the presence of three following conditions in the remainders by virtue of Spss output in order to define the accuracy of the regression model and effectiveness of the presented model:

- the remainders should be normal;
- the remainders variance should be fixed;
- the remainders should be independent.

Having defined the Durbin–Watson amounts we concluded that the errors independent for all variables and $1.5 < \text{Durbin-Watson} < 2.5$. Also having examined the outputs we concluded that the errors were fixed and their variance was fixed.

7. Conclusion

The findings from H1 indicate the financial leverage has had negative and significant effect on nonfinancial information disclosure quality. By virtue of signalling (Messaging) theory it was expected that the firms with higher financial leverage disclose more information to decrease the agency costs and information asymmetry; one of the probable reasons may be related to lack of ranking firms in Iran capital market and the same finance costs in most firms active in the market free from risk. On the other hand, it seems that the banks and credit institutions as the main factor financing firms do not request for more information disclosure and transparency from the companies. The findings from H2 indicate the profitability has had positive and significant effect on nonfinancial information disclosure quality. Singhvi and Desai (1971) stated that more profit makes the directors disclose more information to justify their potency and role in maximizing shareholders' wealth so the management reward increases. On the basis of signaling theory the directors of high profit firms are proud of the achievement and disclose publicly more information in order to show the positive effect of their operation. On the contrary, the directors of low profit firms feel the risk and limit the information disclose to hide somehow the weak operation of the company. The findings from H3 indicated the firm life has had positive and significant effect on nonfinancial information disclosure quality. Ansah (1997) stated the older firms are able to produce more information with less costs than the younger ones because of more organized system, more experienced staff and more expert accounting system. Also the younger ones are more vulnerable in competitive conditions especially if they disclose defined cases such as the information related to new study and development costs while the older ones are less vulnerable, if such information is disclosed by the competitors.

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Analysis of the Research Projects in Relation to Analytical Hierarchy Process

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Abstract: Nowadays, the research projects are financed from private funds granted with the purpose of achieving certain potential results that involve a high effort, both financial and human. In order to increase the efficiency of all aspects of the projects it is highly important to detect their benefit during the performance and not only in terms of exploitation of the results at the end of the project. For maximization of the evaluation benefits of the research project it is recommended to invest a lot in planning (time and effort), to integrate the evaluation in an activity in course in the project performance, the personnel participation and implication showing that this participation is important, their implication should be as earlier and as much as possible, to realistically deal with the problems occurred. This paper examines how the impact AHP following that through further studies to develop a model for assessing the economic value of research projects.

Keywords: research project; evaluation; analysis; qualica

JEL Classification: G32; O22; O32

1. Introduction

Analytical Hierarchy Process (AHP) is one method of analysis of the questionnaire based on which the research projects were analyzed. AHP is a multi-criteria decision making method used for establishing the decisional hierarchy of the problem. On the head of the hierarchy stands the objective for which the best decision will be made. The next level of the hierarchy contains those attributes of the criteria contributing to the assurance of decisions quality. Each attribute can be divided into even more detailed attributes. The lowest level of the hierarchies contains the alternatives for the decisions. After the hierarchic network is established, one can determine the priorities of the elements depending on each level and synthesize the degree in which these provide for alternative decisions.

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Reciprocal comparisons are made in order to determine the relative importance of each criterion that complies with the complete goal (***, 2012a).

2. Comparative Methods

About Expert Method

The Quality Function Deployment Method (QFD) aims to eliminate the possible errors that may occur in the whole process, even before conceiving the design of a new product or service. This method meets the customers' needs and gives to the producer or to the service provider the possibility to design this market oriented product or service. Being based upon the information gathered from customers, this method satisfies the customers' demands, thus the product or the service is conceived depending on the customers' requirements. This complex method was developed in order to maximize the customer satisfaction and to measure it using various techniques and methods.

The Quality Function Deployment (QFD) meets the customer needs and provides to the manufacturer or to the service provider answers to design this market oriented product. The whole process is based upon the information received from the customers that help the manufacturer to design the product in order to meet the customer needs. This is a complex method developed with the purpose of maximizing the customer need by using different techniques and methods (Chen and Chen, 2002). The QFD method was invented by Yoji Akao (Akao, 1997), who defined QFD as „a method for developing a design quality aimed at satisfying the consumer and then translating the consumer's demands into design targets and major quality assurance points to be used throughout the production stage” (Mazur, 1993).

Thus the purpose of QFD method can be translated as follows (Dragan, 2011):

- *Quality*, because the customer needs are transferred into the final product;
- *Function*, because all organizational units work jointly;
- *Deployment*, in order to divide all necessary activities that have to be measured and controlled, in more specific units.

The QFD method was first applied in 1974 at Toyota Company in Japan. Makabe (Japan) and D. Clausing (United States) (Hauser and Clausing, 1988) specialists in the field of quality conceived a simplified method called „House of Quality“ which is a diagram made out of 6 matrices (Hauser and Clausing, 1988):

- the matrix of the customer needs;
- the matrix of the technical characteristics;
- the relationship matrix;
- the correlation matrix;

- the matrix of the technical evaluation;
- the matrix of evaluation of the customer satisfaction.

This method can be adjusted depending on the evolution of the research; furthermore it provides the option to include all matrices or only a part of these into the analysis depending on the expected result (Hauser and Clausing, 1988).

In order to get through all the work phases, we used a diagram called House of Quality, as a graphic support (Hauser and Clausing, 1988). House of quality consists of 6 matrices: the matrix of the customer needs; the matrix of the technical characteristic, the relationship matrix, the correlation matrix, the matrix of the technical evaluation; the matrix of evaluation from the market perspective (Jagdev et al, 1997)0.

The hardest think in applying this method is to complete *the matrix of the customer needs*, which requires a large number of data and information originating from different sources. The customer requirements and *the degree of importance* given by the customer to these requirements are included in this matrix (Crişan et al, 1999).

The matrix of technical characteristics includes the manufacturer or service provider requirements; more specifically it contains the characteristics of the product/service provided by the manufacturer in order to meet the customer requirements (Crişan et al, 1999).

The relationship matrix represents the central area of the diagram that determines the relationship of *customer requirements to technical characteristics of the product/ service*. Inside this matrix the translation of the customer requirements into the technical characteristics of the product/service is practically made. This is the center of the diagram due to the fact that in this matrix we can identify the nonconformities before designing the product/service (Crişan et al, 1999).

The correlation matrix is on the upper side of the diagram showing the interrelationship of the *technical characteristics*. Identification in due time these interrelationships, confers to the manufacturer/ service provider the possibility of saving a significant amount of resources during the product planning. These interrelationships/ correlations may be positive (+) or negative (-), however other scales are possible: strong positive, positive, negative, strong negative, neutral etc. (Crişan et al, 1999).

The matrix of product/service evaluation in the relationship with the market and the market requirements is placed in the right side of the diagram. In order to fill in this matrix a market research is required. Furthermore, the importance of each requirement and possible suggestion of improvement can be made (Crişan et al, 1999).

The matrix of product/service evaluation from the technical perspective is placed in the lower part of the diagram. This matrix established the importance of each technical characteristic for satisfying the customer requirements. This method of quality management can be successfully applied for designing a service (Opruța et al, 2008), being extremely useful for the competitive development of a study program and its orientation to meet the market requirements (Crișan et al, 1999).

In order to analyze the course of the research project, I have introduced the data in the QFD Qualica in order to analyze data obtained from questionnaire.

In order to apply this method the following stages should be considered (Akao, 1997):

- determination of the requirements and their importance depending on the importance given by the client (Akao, 1997);
- setting up by the qfd team of the quality characteristics. the degree in which the quality characteristics cover the requirements will be underlined in the relationship matrix using a scoring system. (from 1 to 10) (Akao, 1997);
- establishing the values of the quality characteristics that are to be achieved for the new product or service and evaluation of the difficulty degree of their achievement. concurrently, it is defined the preferable direction of variation for these values (increase, decrease, or indifference) (Akao, 1997);
- evaluation of the interactions, of correlations between the quality characteristics, the results are written in the correlation matrix which represents the roof of the house of quality (positive or negative) (Akao, 1997);
- the comparative analysis of the planned product or service with the products or services provided by competitors, taking into consideration two aspects: the customer point of view and comparison of the technical level of the products and services with those of the competitors (Akao, 1997);
- establishing the quality characteristics of the new product or service (Akao, 1997).

3. Analysis of Data with the Empiric Method and the Expert Method

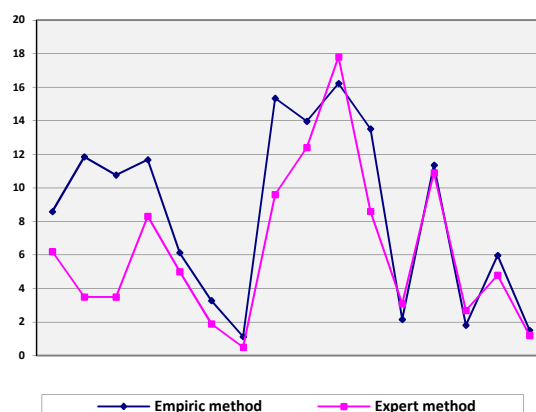
By filling in the data of the questionnaire related to the course of the research project in Qualica QFD Program I succeed in performing an analysis of the quality characteristics, the importance of each component part of the research project taking into account the multiplicative effects. After analyzing the House of Quality, we found out that the most important multiplicative effects occurred in the course of the research project are VAT (17.80%), maintenance/ development of the companies providing products and services (12.40%), dividends (10.90%).

Data related to the exploitation of the research project results analyzed using Qualica QFD allowed us to obtain certain data related to the importance of the

components, of the multiplying effects and the importance of different components. Analysis of data related to the research project results shows an increased importance of the profit (29.90%), of dividends (11.70%) and of VAT (8.50%).

Following the analysis of data using the two individual methods (the empiric method and the expert methods) we reach to conclusions related to the component elements considered distinctly.

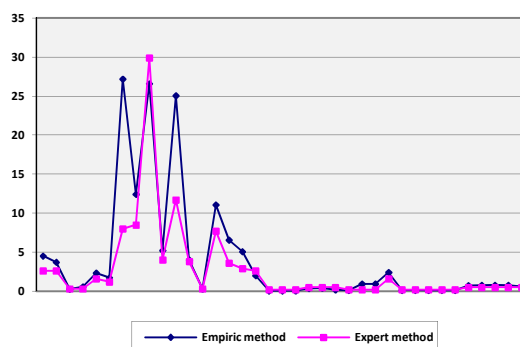
Using the comparative analysis of data related to the performance of the project by means of comparative analysis based on the results obtained from the questionnaire related to the research projects and using the expert method by means of filling in the data from the questionnaire into the Qualica QFD we noticed a constant evolution of data, excepting the outcomes related to the maintenance of/increasing the production of equipment, the maintenance of/ increasing the production of raw materials, consumables, the work places constancy/ creation, the maintenance of/increasing the purchasing capacity, in accordance with the graph no.1



Graph 1. Comparative Analysis of the Course of the Research Projects Using the Empiric Method and Expert Method

Source: According to the Study Performed During Doctoral Program

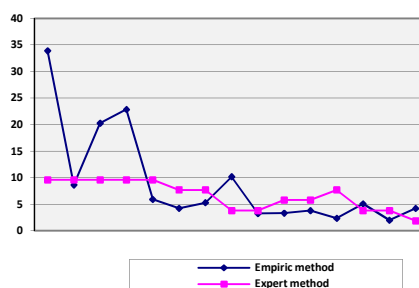
Using the comparative analysis of data related to the exploitation of the project result by empirical method based on the results obtained from the questionnaire regarding the research projects and using the expert method by filling in the data from the questionnaire into Qualica QFD program we noticed a constant evolution of data excepting the effects concerning the profit, the maintenance/ development of the companies providing goods and services and the dividends, according to the graph no. 2.



Graph 2. The Comparative Analysis of the Exploitation of the Research Project Results Using the Empiric Method and Expert Method

Source: According to the Study Performed During Doctoral Program

Using the comparative analysis of data related to the economic value in the course of the project by means of the empiric method based on the results obtained at the questionnaire regarding the research projects and by means of the expert method by filling in the data from questionnaire into the Qualica QFD program we noticed a constant evolution of data according with the graph no. 3. The capital gain determined using the empiric method is given by the human resources component involving salaries, taxes and contributions and by the following components: equipment purchase, raw materials acquisition, materials and consumables purchase and the component of human resources from indirect costs (operating costs).



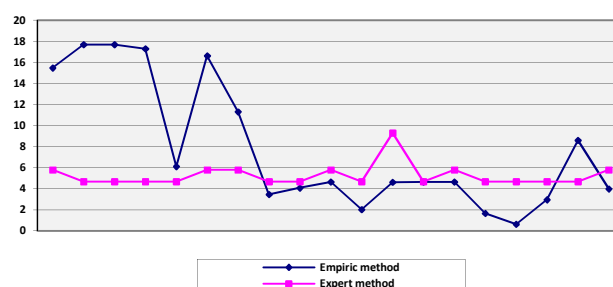
Graph 3. Comparative Analysis of the Economic Value in the Course of the Research Project Empiric Method and Expert Method

Source: According to the Study Performed During Doctoral Program

Using the comparative analysis related to the economic value of the exploitation of data regarding the economic value of the exploitation of the research project results by means of empirical analysis based on the results obtained at the questionnaire

concerning the research projects and by means of the expert method we noticed a sinuous evolution of data, in accordance with the graph no. 4.

The biggest differences occur in the empiric method for the following results: creation of the new work places, the environment quality, the environment safety, and preservation of the natural resources, development – innovation, chances equality, and technological transfer. This characteristic represents the confidence in obtaining these results and orientation of the research projects towards such results. To the contrary, the expert method underlined other types of results as being important: networks, processes, projects, models, copyrights, trademarks and products patents, computer programs, patents applications, scientific publications with the project results, consulting activity, opportunities of access to new financing sources.



Graph 4. The Comparative Analysis of the Economic Value of the Research Project Results Exploitation Using Empiric Method and Expert Method

The analysis of the two phases will continue with the generalized method of dimensional analysis. This type of analysis consists in the association of certain measuring units of the economic indicators based on which we establish a relationship between a constant and an economic value, followed by a new comparative analysis of the three methods. Based upon this analysis I will conceive a pattern for assessing the economic value of the research projects, that will be applied to several research projects developed in certain research centers from Cluj-Napoca.

4. Conclusion

The comparative analysis of the two methods highlights that important positive effects occur in the course of the research project, as well. In order to obtain financing funds for the research projects the degree of recover of the investment is considered taking into account the exploitation of the results obtained at the project finalization, notwithstanding the project effects occurred in the course of the project.

5. Acknowledgment

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Transport Infrastructure Influences on the Regional Development

Frantz Daniel Fistung¹, Oana Bianca Fistung², Teodor Popescu³

Abstract: The scope of this work is to analyze the influence of transport infrastructure, on regional development. Moreover, it aims to illustrate the major influences of the economic, social and ecological factors on transport infrastructure development. In that respect, starting by analyzing the current views on national and international levels regarding these items, the work propose to go further, by supplement these theories with some new elements, requested by the current and future society's evolution. Thus, for the analysis of the relationships between transport infrastructure and the regional development, we propose a new scenario, based on the sustainable development principles. This approach, again, is given in the paper, through research investigations carried out, both, in terms of theory and practice, using actual Development Regions of Romania data. Finally, the work findings highlight several solutions that could be included in the further socio-economic-ecological development strategies of The Romanian Development Regions, according with the sustainable transportation concept. The work is useful for the academic specialists and decision-makers, offering an extended support for regional and infrastructural policies.

Keywords: modal infrastructure; regional development; sustainable transportation; policy measures

JEL Classification: R40; Q56; R11; L91

1. Actual Transport Particularities, At National and International Levels, That Could Influence the Regional Development

In the last years have appeared two major topics of debate, regarding the relations between the society development and transportation.

The first one is based on the idea that the transportation main development indicators must be "disconnect" with those that characterize the socio-economic development of the entire society.

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In other words, it is underlined the idea that the transportation indicators rhythm and evolution direction (negative or positive) must not, automatically, correspond with the rhythm and direction of those that characterize the socio-economic development of the society. More directly speaking, transportation must be analyzed separately, and not as an emblematic element of society socio-economic growth.

The second debate theme seems to appear along with the need for dimensioning of the investment in transport infrastructure. If we increase or modernize the transport supply we, automatically, obtain economic growth? It is obvious, in other words, that, if we invest money today in the development or modernization of the transportation infrastructure, tomorrow we receive, without any doubts, economic profit?

Only one conclusion after these two topics: in the development process of the entire society, transport infrastructure importance is undeniable, but the influence intensities and magnitudes are different from case to case.

In Romania's case, is generally recognized that transport infrastructure is not in the best conditions, this thing being one of the most important obstacle in the country positive economic evolution over, at least, the past two decades.

Current network infrastructure, designed, developed and modernized over several past centuries is fairly balanced, spatially speaking, covering the national territory. Almost every rural or urban locality has a transport connection with others. Unfortunately, there are some negative results of the last period of transport infrastructure development, at national and regional levels, like:

- Regarding the current and future society requirements, the share of modernized infrastructure routes is small. This creates a discomfort and a decrease in the attractiveness of economic investments. For example, from the total length of roads, in 2012, they were modernized only 32%, and from the total length of railways, less than 38% were electrified;
- Maintenance and development of the infrastructure network (especially railways) are deficient made, in favor of funding preferentially the motorways construction, some of them not being economically justified. It is almost obvious that, for example, the *Sun Highway* (Bucharest-Constanta) is unprofitable. Profitability could be achieved only if the economic activities in the Black Sea and Danube areas (especially those with Constanta Harbor connections) will increase substantially, which means an improvement in the naval infrastructures, which is not considered a priority at this time for the decision makers and politicians;
- Gain obtained through the past development of the national railways network, as premise of sustainable transportation achievement, is losing every year. This is due to the fact that in the last twenty years, has been supported by public funds only roads development, in particular the motorways, which means that railways

and other transportation infrastructures modes, such as naval or multimodal ones, was under funding. Even so, due to the lack of funds, Romania, at present, has no proper developed motorways network. In the same time, the other infrastructure transport modes were permanently damaged, leading to a critical state of the art;

- Political reasons exceeded in the approval process of the infrastructure projects in preference to economic justifications. In our opinion, the most illustrative example is the construction of the navigable channel Danube-Black Sea, developed with huge material and human efforts, and almost unused at present;
- There are zones in Romania which are endowed with natural naval transport infrastructures (particularly, the south and southeast areas), but this advantage was, and is use in a very small measure.

Unfortunately, even now, these major problems seem to be uninteresting for the decision makers. They support, again, only the motorways development or/and other economically unviable or non-priority programs. The most illustrative example, in the last period of government, is given by the SOP-T¹ program, where the scope, only on paper, is to support the sustainable transportation development. In fact, no project of that program has that orientation. Moreover, the government document highlights the wrong idea that, the sustainable achievement could be reached mainly by motorways network development.

2. Interdependencies between Socio-Economic Development and Transport Infrastructure, At Regional Level

Qualitative and well-dimensioned transport infrastructure network could be the support for efficient economic activities, and for meeting the goods and population mobility needs.

The use of modern railways, roads, inland waterways, ports or airports networks analysis shows us some of the interdependences within several influence factors of the transport market (Stoica, 1997). A transport network that is trying to avoid services dysfunctions has some influences, firstly, on the economic demand and secondly, on the supply. From the supply point of view, is important to mention that providing adequate infrastructural capacities (qualitative and well-adapted on demand) it is possible to “subsidize” some economic activities by reducing their final production costs.

Therefore, we can underline one important item: the existence of a transport network has many and important influences on the region that it cross. However, not all the influences go to positive directions. Unfortunately, a part of those are

¹ POS-T is the Sectorial Operational Programme “Transport” for 2007-2013 (Romanian Government - The Transport Ministry (2006)).

quite negative, if we are taking about more and more land occupation, phonic or chemical pollution due to transport activities supported, obviously, by the specific infrastructures.

It is also interesting to underline the effects of transport infrastructures on the regions, where these exist. In that respect, we can establish two major types of effects: direct and indirect. Direct effects have two large subdivisions (Vikermann, 1991): a) quantifiable effects, such as those that influence the manufacturing activities results, by reducing the transport costs and b) subjective effects, such as the changing perception of a particular region, crossed by an adequate and well-maintained transport infrastructure.

Regarding the indirect effects, the analysis can be orientated through the assessment of the changes, made by some new transport infrastructure construction, to the socio-economic development level of the region, changing its relative competitiveness, production capacities or regional income level.

Besides these two main categories, the European Commission's Directorate General for Mobility and Transport has introduced a third category, the so-called *effects of catalytic converters*, with significant impacts on some socio-economic policy instruments, or regional development (European Commission, 1996).

Integration of the various types of effects produced by quantitative and qualitative development of transport infrastructure changes, in one of these three main categories, must be analyzed together with some spatial, temporal and/or economic characteristics. The transport demand being not transferable means that, a global transport infrastructure supply cannot be assessed by itself, but only in relation to network topology and geography of the territory. Usually, the regional economy is analyzed mainly through the incomes balance, due to the existing natural resources, the production factors or the existing technologies. Nevertheless, one improper transport infrastructure supply could lead to syncope in overall development of the regions, by the existence of entry barriers in the movement of goods and persons, with negative effects on economic activities and employment. At the same time, it is generally accepted that favorable socio-economic regional development is closely related to the size and quality of transport infrastructure in those areas. Transport quality parameters are associated to each stage of infrastructure development/modernization.

It is no guarantee of the regions favorable economic evolution if there is a development process of transport networks. Moreover, from a certain level, due to the negative effects on the environment and human health, the development of such transport infrastructure networks could be considered inefficient. One research study made in 2000 underline that (Goodwin, 2000):

- There are no automatic benefits in economic and employment areas by developing transport infrastructure projects and even so, one of them could be harmful;
- For projects that produce positive economic effects, their real dimensions must be carefully evaluated, because there are situations where the negative effects, produced upon the entire society, may exceed the benefits;
- Using the cost-benefit analysis, in this particular case, could be a wrong idea, because of the imperfect assessment of the infrastructure network economic impact;
- In our analysis, we must break the link between the economic generally development and the transport activities, especially in those situations where it aims to adopt instruments for correcting some markets distortions.

Based on these arguments, we suggest being prudent when design and develop transport infrastructure plans at regional level. It is not obviously at all that it could be attempt favorable economic evolution of the regions by only developing transport infrastructure networks. For this reason, we must make a more detailed analysis to understand better the effects produced by the transportation infrastructure on regions economic development.

In this respect, the analysis could be based on three main scenarios (Botric, Sisinacki, Skufflic, 2006):

- regional development through a surplus of infrastructure;
- regional development through a deficit of infrastructure;
- regional development through a balanced developed infrastructure;

Along with these, in the current stage of society evolution, we strongly recommend a new scenario, the fourth one in our presentation, based on sustainable development principles:

- regional development through sustainable transportation infrastructure.

This new type of approach is required by the last society evolutions, where damages due to transportation (infrastructure and activity) made on environment and human health are important. In many cases, these negative effects are more important than the benefits received, on regional level. This is why, over the past few decades, the modernizations or the developments of the transport infrastructures are encouraged to be made, notably in Europe, on sustainable transportation concept. In our opinion, we consider sustainable transportation: "that complex system designed to meet the need for mobility requirements of present generations, without damaging the environmental factors and human health, while improving the efficiency of the energy consumption, so that will be possible to satisfy the mobility needs of future generations". (Fistung, 1999)

In this respect, at regional level, we must reconsider the transport infrastructure modernization or development projects, so the external negative costs due to transportation could be minimized or, why not, eliminated. It is necessarily, according to that, to support the development of the less pollutant infrastructure networks such as multimodal and railways.

It is also true that, at the least developed regions, if the capacity of transport infrastructure exceeds demand, are created favorable conditions for the development of the region. This approach could be possible by cutting the transportation costs and enabling the reduction in production costs. Based on that, it is possible to obtain increased profits, which in turn, can become attractive for new investments in the region.

However, this situation is, in many cases, not realistic and that is why it could not be a safe and favorable assumption for the development of the regions.

In the opposite situation, intensive economic activities require increased capabilities of transport infrastructure, which needs, in many cases, the development of new infrastructures or the improvement of the existing ones. This situation is found, in particular, for the economic well-developed regions.

According to the very high value of investments in the case of transport infrastructures, it is necessary that the supply be dynamically adapted to the demand. This function, regarding the steps evolution of infrastructure capacity, must be adapted as much as possible, to the necessary capacity development (Raicu, Olaru, 1996). By that, we can reduce the time when capacity increases, developed by infrastructure investment projects, can be gradually assimilated. Because of the long period between the start and the end of an investment in the transport infrastructure development (several years or decades, in general), there are not excluded situations of over or sub dimensioned capacities, due to some unconfirmed traffic forecasts. This is why, even if the balanced developed infrastructure is the optimal solution, according to the particular demands of the socio-economic activities, that situation is very difficult to be attempt.

In conclusion, we can underline that, at regional level, the processes regarding upgrading and modernization of transport infrastructure must take into account that:

- Transport infrastructures is needed for the socio-economic development of the region, but the mere existence of it does not lead, automatically, to obtain benefits;
- The projects for the development/modernization of transport infrastructure should be carried out on medium or long periods, so that capacity supply can cover the actual and further mobility demands;

- The development of sustainable transportation, as the European Union supports it, implies the internalization of negative externalities due to specific activities and infrastructures. This can be reached by implementing specific policies (economic and administrative) and by supporting the multimodal and the environmentally friendly transport modes, in preference to the most polluting modes.

3. Some of the Links between the Regional Development and the Transport Infrastructure, Specific for Romania

A proper transport infrastructure offers mobility opportunities and supports the economic growth, as we have seen before. In this context, the Fifth Report on Cohesion of the European Commission goes further with that idea and underlines that, in terms of quality and availability, weak infrastructure can inhibit this support (European Commission, 2010).

Unfortunately, in the case of Romania today, accessibility to modern infrastructure is strongly differentiated from one region to another, from one city to another. Social development tends to be higher in villages near major cities than in the distant ones or in surrounding localities “on the major road axes”, compared with rural localities who have access only to communal or county roads. In fact, a major cause of disparities of inter and intra regional development is given by the different ways of access of regions to county, national and international transport infrastructure, as well as its inadequate quality. (Romanian Government, 2006)

A survey made on almost 90% of the 3181 Romanian rural and urban localities indicates that the most developed localities are large cities, located near important transport infrastructures, with strong attractiveness for working commuters. The most relevant regions, from this point of view are in Banat, Transilvania or Dobrogea, not taken into consideration Bucharest and its neighborhoods. (Sandu, 2013)

Bucharest-Ilfov, Central and South are the main beneficiaries to a proper transport infrastructure. Among regions with limited access to transport infrastructures is the North East region, an example being the Botosani county, which has 16,8% impracticable roads.

At the intra regional level, the inadequate transport infrastructure prevents the development of small and medium-sized cities, communes and villages. Many areas have very weakly developed road networks between cities, like villages from Danube Delta, Apuseni Mountains or Mehedinti Plateau, causing their economic involution or even their isolation.

If we investigate the transport infrastructure network and the development level for the Romanian Regions, we can highlight some interesting aspects. In this respect,

in the table no. 1, we present the evolution of some important regional economic development and road infrastructure indicators. The analysis takes into consideration recent periods, each between six and eight years. The targeted indicators are:

- Roads density, for 100 km² of territory (ROADS in table no.1);
- Regional GDP;
- The amount of direct foreign investments, made at regional level (INVESTMENTS in the table no.1).

We use these indicators because:

- The development of the road infrastructure was the main financially supported in the last decades, in Romania;
- The road infrastructure is the most important transport network for Romania, mainly at regional or county levels;
- The regional economic evolution could be well defined within the GNP trends;
- The Regions attractiveness (from economic and social points of view) is well shown by the foreign investments level. In addition, the foreign investments are more important than the national ones for the regional development, especially in difficult economic moments such as financial crisis.

Table 1. Comparison between the Evolutions of Some Specific Indicators Regarding Road Infrastructure and Regional Development¹, in Romania

-%-

Region	Period	ROADS	GDP	INVESTMENTS
		2004-2011	2004-2009	2005-2010
North East		102.2039	176.4949	158.8
South East		102.381	169.5534	146.7
South		105.7471	198.5436	131.1
South West		103.6313	173.8898	77.6
West		102.5157	185.6274	142.8
North West		104.0346	185.0339	174.9
Central		106.734	187.0654	79
Bucharest-Ilfov		102.0877	235.8281	140.3

Source: Data Processing after Statistical Yearbook of Romania, 2006, 2007, 2011, 2012

¹ In the analysis was taken into consideration the Romania's Development Regions structure for 2011

4. Some Analysis Conclusions:

Transport infrastructure had a small and positive trend of evolution for all the Romanian Regions, with higher values registered only in both the South and Centre of the country (without South East Region);

The regional GDP has grown sizable in the analyzed period, in all the Regions, reaching near double value. This can evidence, if we do not take into consideration the exchange rate evolution that we will have to do with an intensification of economic activities. From this point of view, the highest rate of evolution was registered in the South and West Regions;

The foreign direct investments have increased in all Regions, with the exception of Central and South-West Regions.

Based on these conclusions, we can affirm that theoretical aspects presented above are mainly confirmed, in the case of development regions in Romania. Thus, in regions where transport infrastructure development was more sustained (in Central Region, for example), foreign investments has been less than in other Regions (Figure 1). In the same time, Regions with similar trends for the road infrastructure development (like the North West Region, for example), received greater direct foreign investments, what was found in a high level of regional GDP.

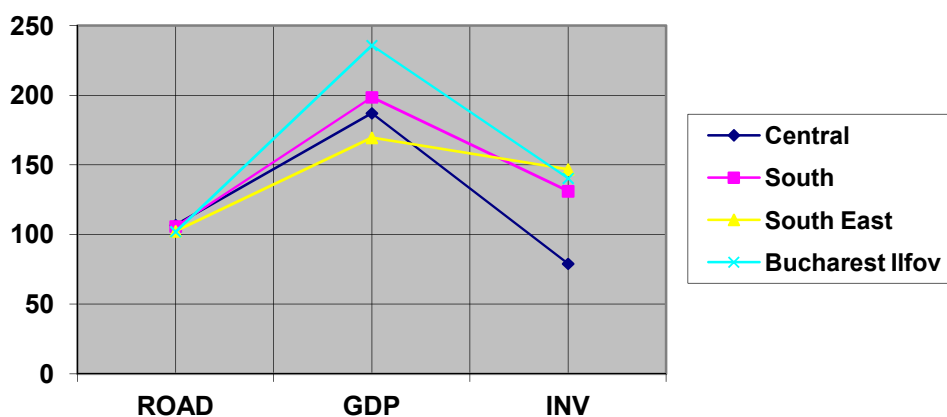


Figure 1. Evolutions of the Road Infrastructure and Economic Development Indicatorsf Some of the Romania's Development Regions

A special situation exist in the Bucharest - Ilfov Region, where the GDP growth was the most intense at national level, but the direct foreign investments and the roads development are smaller than in other Regions. This situation is due to the quality of the transport infrastructure that covers, quite well, the demand for mobility of persons and goods. Nevertheless, if we take into consideration the

economic and social development tendencies for this Region, the actual situation will change in the future, because it will be necessary to improve and modernize the transport infrastructure, in order to attract larger economic investments, especially in Bucharest and neighborhoods.

The major conclusion after the analysis made for Romania's Development Regions: for reaching a better socio-economic development of Regions and for covering the increasing mobility needs, both persons and goods, and taking into consideration the current low degree of modernization level of transport infrastructure, it is necessary to implement some priority actions. In this respect, we can point out:

- To really support, the development of a sustainable transport system. In this context it is necessary to internalize the external costs due to transportation and permanently encourage the environmentally friendly transport modes;
- To reassign the public funds from motorways to the development and modernization of European, national and county road networks. We can underline that the modernization of the entire Romania's current roads network at high quality standards, is equivalent to 2.000 km motorways network construction. It is true if we take into consideration that the construction of one km of motorways road needs as minimal value, two million Euro, and for the modernization of one national/county road km is necessary as medium value, 300.000 Euro (Fistung, Miroiu, Popescu, Șerbulescu, 2008). This policy could also improve the employment national rate by offering many working places, in roads modernization activities, all over the country;
- To develop high capacity transport networks with reduced negative effects on environment and human health, in those Regions where this is possible;
- To create some economic facilities for the development of some "business incubators" which will financial support the development/ modernization of the transport infrastructure at regional level.

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Determinants of Intellectual Capital Disclosures in Nigeria

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Abstract: The future drivers of any corporate economy can no longer be capital, land or equipment; but the people and their knowledge base. Several Nigerian firms have started disclosing information on Intellectual Capital. In the setting of our research, we study the determinants of the disclosure of Intellectual Capital information in annual reports of firms listed on the Nigerian Stock Exchange. A content analysis of annual reports complemented with archival data from sample firms was used to ascertain the determinants of the extent of Intellectual Capital information disclosure. The results highlight that the size of a firm and the industry type play significant roles as determinants for the disclosure of Intellectual Capital information in annual reports. However, in contrast with earlier studies and theoretical arguments of voluntary disclosure, this study does not document any relationship between the Intellectual Capital disclosure level and firm profitability. The paper contributes to literature by providing a better understanding in general to what kind of firms that actually disclose information on intellectual capital in Nigeria and also provides awareness that profitability as crucial as it might seem is not a driving determinant of the decision of Nigerian firms to disclose intellectual capital information.

Keywords: Accounting; Firm Performance; Firms

JEL Classification: M41; L25; L1

1. Introduction

From amassing evidence, it seems that the pressure on companies to report more is increasing. It is also abundantly clear that various levels of disclosure are possible and that companies must be clear about the distinctions if they are to proceed safely (Pike et al, 2002). According to Lev and Zarowin (1999), the relevance of traditional financial accounting information has diminished in the past few decades. Its limitations have attracted greater in the wake of a series of scandals

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and corporate collapses in recent years (Barsky et al, 2003). Financial statement information is only relevant if it is able to confirm or change investors' expectations regarding the value of stock or value of the firm. It is usually relied upon by market stakeholders in decision making; however, its emphasis is usually on monetary results without proper attention given to intangibles which are also substantial factors usually given paramount attention by investment participants. This position is actually a constraint of financial reporting. Nevertheless, Ardiansyah (2010) suggests that this problem can be reduced or avoided by using voluntary disclosure as supplementary information to financial statements. Voluntary disclosures reveal more qualitative information, most especially as it concerns intangible assets which are potentially important assets of the firm.

The issue of value relevance of intangibles is gaining grounds in the financial reporting literature due to the ever increasing interest in the components of intangible assets items including goodwill and intellectual capital (Shukor et al, 2008).

The terms Intellectual assets, Intellectual capital and intangible assets are used interchangeably as they represent a non-physical claim to future benefits (Ali et al, 2010). According to Kavida and Sivakoumar (2008), economists call them knowledge assets, management experts refer to them as intellectual capital and accountants call them intangible assets or intellectual assets. They are all one and the same. It is simply a set of knowledge, information, intellectual property, goodwill and expertise which can be used for the purpose of creating wealth (Stewart, 1997). According to Itami (1987), intellectual capital (IC) is an intangible asset which includes technology, brand name, customer loyalty, goodwill and copyrights. Basically, IC comprises of three components: human capital, structural capital and relational or customer capital (Yang and Lin, 2009). Human capital consists of skills, competencies and abilities of individuals and groups; structural capital refers to knowledge assets alternatively referred to as intellectual property such as patents, copyrights, trademarks, models, knowledge artefacts, computer networks/ software and so forth while customer capital is the strength of relationships with customers, suppliers and allies such as customer loyalty, brand equity, market share, etc. every organization possesses some or all of these variants depending on the industry type and strategy.

A major development in the history of intellectual capital (intangible assets) standardization in Nigeria is the recent compliance with International Accounting Standard and International Financial Reporting Standard. The Nigeria Accounting Standards Board (NASB) now Financial Reporting Council (FRC) issued SAS 26 (Business Combination) in 2007. It was to guide the specific accounting treatment of goodwill in compliance with IFRS 3. This has ushered a further interest in IC.

The rising interest in IC studies has spread all over the world in both developed and developing countries. Several prominent studies have been conducted (see Guthrie and Petty, 2000; Tayib and Salman, 2011; Li et al, 2006; Bontis, 2004, etc). In Nigeria, only few studies on IC have been documented. These include Okwy and Christopher, 2010; Tayib and Salman, 2011 and Angaye et al; 2010. These studies have concentrated on either the IC reporting practices or the interaction of IC with board mechanisms and investment decisions. None of these studies has attempted to examine the possible determinants of voluntary IC disclosure in Nigeria. In consequence, this study is poised at filling this gap. Thus our primary objective in this present study is to analyze the determinant factors of intellectual capital reporting in Nigeria.

2. Theoretical Underpinnings

The signals theory provides an explanation to voluntary disclosure behaviors as a control mechanism geared towards reducing information asymmetry arising from separation between ownership and management. Voluntarily disclosed information is signals addressed to investors with a purpose of reducing the information gap between insiders and outsiders. The signals theory is based on two assumptions: Firstly, managers are better informed than shareholders or the public concerning the firm's position and also, given that managers have the information advantage, they may choose to disclose information in an attempt to send signals to the public regarding the firm's position.

The signals theory suggests that large, visible and profitable firms will disclose more information to inform their stakeholders about their sound performance. In other words, large firms with relatively good performance are more likely to disclose more IC information as compared to firms with bad performance (Neysi et al, 2012). This is possibly to engender legitimacy and acceptability so as to meet up with public expectation.

3. Literature Review and Hypotheses Development

The amount of IC information has been increasing in the last decade in line with literature on communication to stakeholders which is of the belief that companies with major intangible values – e.g. Research and Development, patents, market share, etc- have to publish sophisticated and varied non-financial information in order to reduce the information gap (Bukh, 2002). Intellectual Capital information usually takes the form of voluntary disclosure which primarily acts to reduce information asymmetries. Such voluntary disclosure refers to information made available at the discretion of the company.

According to Rouf (2011), the extent of voluntary disclosure is influenced by changes in the attitudes in society, economic factors and behavioral factors such as the corporate culture. Several studies have analyzed the association between firm characteristics and disclosure in annual reports (see Chavent et al; 2006 for an exhaustive summary of disclosure studies. Most of these studies constructed a country-relevant disclosure index and related the bulk of information disclosed in the annual reports to selected corporate characteristics. Meek et al (1995) demonstrated that firm size, leverage, international listing status, and country of incorporation influence voluntary disclosure. Marston and Shrides (1995) reviewed 32 disclosure studies and have found controversial results with respect to a link between the level of voluntary disclosure and leverage, profitability and auditor firm size. Chow and Wong-Boren (1987) maintained that firm size, financial leverage and proportion of assets in place affect the level of disclosure.

There is mixed evidence on the determinants of voluntary information disclosure including IC information. Barako et al (2006) and Brammer and Pavelin (2006) after conducting their investigations observed that the larger the firm, the more likely they will make voluntary disclosure. Bruggen et al (2009) examined a sample of 125 publicly traded Australian firms and document that firm size is a determinant for intellectual disclosure of firms. Aripin et al (2008) suggested the underlying reasons why larger firms disclose more information. They argue that managers of larger firms are more likely to realize the possible benefits of better disclosure and small companies are more likely to avoid full disclosure which might endanger their competitive position. Hossain et al (2006) demonstrate that the size of a firm does affect the level of voluntary information disclosure. Based on the mixed results, we state our hypothesis in null form:

H₁: Firm size has no significant impact on the level of IC information disclosure.

Meek et al (1995); Marston and Shrides (1995); and El-Gazzar and Fornaro (2003) suggest that profitable firms are expected to disclose more information about their performance. Haniffa and Cooke (2002) find a positive and significant association between the firm's profitability and the extent of voluntary disclosure. Their results conform to that of Leventis and Weetman (2004) and Marston and Shrides (1995) that profitability is a key determinant of voluntary information disclosure. On these accounts, we hypothesize that:

H₂: Profitability has a positive significant impact on the level of IC information disclosure.

Bozzolan et al (2003) investigate the annual reports of 30 non financial companies listed in the Italian Stock exchange in 2001. They conclude that industry type influences the amount of IC disclosure in Italian companies. Garcia-Meca et al (2005) reported similar findings for Spanish firms. Williams (2001) identified industry exposure as a significant determinant of the quantity of disclosure. The

literature (Cowen et al, 1987; Patten, 1992) provides with evidence that the operating industry factor has a significant influence on the reporting practice applied by entities. According to Ienciu and Ienciu (2012), it is generally accepted that large entities belonging to a certain industry have the tendency to conduct more detailed and comprehensive reporting. We thus hypothesize that:

H₃: Industry type has a significant impact on the level of IC information disclosure.

4. Methodology

4.1. Sample Selection and Data Source

The population of the study is made up of companies listed on the floor of the Nigerian Stock Exchange. There are 12 sectors on the exchange; however the financial and utility services are excluded from the population because of the special regulatory environment in which they operate. A stratified random sampling was employed to select two companies from each existing industry to arrive at a total sample of twenty quoted firms for the period 2005-2009. This sample is considered a good representation of quoted firms in Nigeria since it envelopes all sectors on the exchange except the financial and utility services. The sample selection is in agreement with Emory and Cooper (2003) criterion for a good sample. They argue that the ultimate test of a sample design is how well it represents the characteristics of the population it purports to represent. Data was obtained from 100 annual reports of sample firms for the period under study.

4.2. Model Specification

A multiple regression model (ordinary least squares) was employed to investigate the potential relationship that exists amongst the study variables. The model is expressed thus:

$$\text{ICDI} = b_0 + b_1\text{Fsz} + b_2\text{Prof} + b_3\text{Construction} + b_4\text{Consumer Goods} + b_5\text{Healthcare} + b_6\text{Industrial goods} + b_7\text{Agriculture} + b_8\text{Information Technology} + b_9\text{Natural resources} + b_{10}\text{Oil and gas} + b_{11}\text{Services} + b_{12}\text{Conglomerates} + \text{eit}$$

Where: ICDI = Intellectual Capital Disclosure Index

Fsz = Firm Size

Prof = Profitability

Variables from b_3 to b_{12} are the coefficients for the 10 industry types under study.

eit = Random stochastic term

4.3. Measurement of Variables

i) Intellectual Capital Disclosure Index – Content analysis which is the most ideal method to explore voluntary information in annual reports (Neuendorf, 2002) was utilized to develop a checklist of 22 established intellectual capital disclosure items. Along the line of Cooke (1989), an unweighted dichotomous rating system was used to assign ‘1’ if an item is disclosed in the annual report and ‘0’ if it is not disclosed. As such, a firm could score a maximum of 22 points and a minimum of 0.

ii) Firm Size – This is denoted as the logarithmic transformation to base 10 of total assets of study firms. Total assets were transformed to log10 due to their varied values and with an objective of mitigating heteroscedasticity problems.

iii) Profitability is measured as the recorded net profit/ loss of the entity. This variable undergoes a logarithmic transformation as well due to large figure documented.

iv) Industry type is captured as a dummy variable. This denotes the industries wherein a study entity operates. Such industry is accorded ‘1’ while others are assigned ‘0’.

5. Results and Conclusion

A normality test was performed to determine that the dependent variable was normally distributed. Violation of the normality assumption invalidates other test statistics like the t-tests and other related statistics (Brown, 1997). Assessment for normality of data can be applied using Kolmogorov- Smirnov test, Shapiro- Wilk test or skewness and Kurtosis.

Table 1. Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
ICDI	.017	90	.013	.097	90	.069

a. Lilliefors Significance Correction

Table 2. Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.632 ^a	.340	.269	.16317	2.076

a. Predictors: (Constant), FSZ, PROF, IND

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.632 ^a	.340	.269	.16317	2.076

a. Predictors: (Constant), FSZ,PROF,IND

b. Dependent Variable: ICDI

Table 3. ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3.414	13	.263	1.20	.043 ^a
	Residual	16.528	75	.220		
	Total	19.942	89			

a. Predictors: (Constant), FSZ,PROF,IND

b. Dependent Variable: ICDI

Table 4. Coefficients

Model	Coefficient	t statistic	Prob
Constant	-9.421	-3.192	.001
Fsz	2.452	4.456	.000
Prof	.0780	.728	.469
Construction	1.997	3.324	.005
Consumer goods	3.164	2.959	.007
Healthcare	1.555	3.067	.003
Industrial goods	1.250	5.815	.000
Agriculture	-.095	-.329	.745
Information tech	3.870	1.996	.045
Natural resources	-1.157	-1.241	.218
Oil and gas	7.540	5.425	.000
Services	3.033	2.852	.009
Conglomerates	2.659	1.544	.032

The coefficient of determination (adjusted) from table 2 reveals that 26.9% of the variation in ICDI is attributed to the explanatory variables used in this study. This is a significant ratio going by the fact that there exist other independent variables that could predict the extent of voluntary disclosures in a firm which might not have been incorporated in the model of this study. The Durbin Watson statistic stood at 2.076. This lends support to the assumption of absence of autocorrelation in the model since it falls within the threshold of '2' (Hair et al, 1987). The F statistic in table 3 confirms the significance of the regression with confidence level of 95%. It shows the overall significance of the regression plane; its P value < 0.05 guarantees

the statistical significance of the model. Table 4 displays the t and p values of the various explanatory variables.

From the results, it is abundantly clear that the industry of operation stands out as a relevant and significant determinant of the extent of intellectual capital disclosures. All the sectors investigated except for the agriculture and natural resources sectors show statistical significant impact on disclosure index. This supports our model specification that the industry type is an important determinant in the extent of intellectual capital disclosure. In other words, there is dependency between the industry a firm operates in and the level of IC disclosure. This result corroborates the findings of Bozzolan et al. (2003) and Bruggen et al. (2001) that the field of operation of a firm influences the level of IC disclosure. Size was also found to be a strong predictor of intellectual capital disclosure (with $b_{10} = 2.452$, $p < 0.05$).

From the investigations of this study, the company size determines the extent to which such firm would report on intellectual capital. This lends support to the study's hypothesis as well as the works of Beaulieu et al. (2002) and Garcia-Meca et al. (2005) that there exists a positive relationship between firm size and IC disclosure level. This study demonstrates that profitability has no significant impact on the level of intellectual capital disclosure. The finding contravenes the work conducted by Ienciu and Ienciu (2012) who in a study of 68 entities listed on the Bucharest Stock exchange document that the level of intellectual capital reporting is influenced by the financial situation of an entity. They however record that the connection between them is not very strong. Based on the finding of this research, we conclude that the profitability level of an entity has no relevance on its intellectual capital reporting level. There might exist a potential relationship between profitability and other voluntary disclosures as found in previous works (El-Gazzar and Fornaro, 2003; Leventis and Weetman, 2004; Haniffa and Cooke, 2002); but this does not hold with intellectual capital in focus.

Size and Industry have been identified as salient determinants of intellectual capital. Large entities would utilize a lot of know-how to remain afloat; this would obviously require a good measure of intellectual capital investments and knowledge assets utilization. Also, such firms would need to maintain their reputation and legitimacy as well as fostering the trustworthiness perception held of them by stakeholders by disclosing IC information reasonably. Another interesting contribution to literature from the investigations of the study is that IC information disclosure is more crucial to some industries than others. Certain industries would remain inoperable without knowledge based assets. These industries would as well want to disclose comprehensive intellectual capital information so as to convincingly prove to stakeholders their level of IC investment which expectedly would trigger improved performance.

The disclosure of IC information is quite crucial to reducing information asymmetry amongst stakeholders and is therefore encouraged. Though there are no operational reporting standards on these form of voluntary disclosures (except for intangible assets), it is recommended that the Financial Reporting Council as well as listed firms develop structures for this type of voluntary information disclosure so as to permit the existence of efficient markets. This study is however limited by the sample size; though representative of the sectors of the Nigeria Stock Exchange, better generalisability could be realized with a larger sample. Also, more determinant factors could be considered for further works such as leverage, equity, and age of sample firms.

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Appendix

Intellectual Capital Disclosure Framework

A. Human Capital

1. Numbers of Employee
2. Employee Equity/ Equal opportunities
3. Training
4. Staff Health and Safety
5. Employee welfare
6. Compensation Plan/ bonus
7. Career Development
8. Employees Knowhow/ Education level
9. Employee Remuneration
10. Human Resource Policy/Human Resource Department

B. Structural Capital

11. Intellectual Properties- Patents, copyrights and Trademarks
12. Research and Development
13. New Product Line
14. New Technology
15. Information Technology/ Information Systems, Software Development/ Networking Systems.

C. Relational Capital

16. Market Share
17. Business Partnering- Franchising, Suppliers, Government, Licensing Agreement, Joint Venture.
18. Supply Chain/Distribution Networks.
19. Promotion Strategies/ Competitive Intelligence.
20. Corporate Image- Social Responsibilities, Environmental Management/ Protection, Statement of Image and Corporate Culture
21. Brands- Range of Products and Services
22. Product Awards

The Internal Audit – Key Pillar of Corporate Governance

Mihaela-Cristina Onica¹

Abstract: The internal audit elaborates recommendations in order to improve the government process for the fulfilling of some strategic objectives, amongst one can mention: the promotion of ethic values within the patrimonial entities, the insurance of accountability, the efficient functioning of the legal entity management, the efficient communication of the risks and information on the internal control to the structures within the economic entity, the effective coordination of activities, the information communication within the management, between the internal and external auditors, as well as the good management of the relation with the Board of Directors. The study is based on the relation between the internal audit and the corporate governance, within the context where the internal audit became an essential pillar for a modern company, because it highly reflects the efficiency by properly using human resources and materials, a better coordination between various departments in a legal entity. By ensuring the fact that the economic entity respects the corporate governance standards, the internal audit establishes the development of an integrity reputation, the development of business relations based on trust.

Keywords: internal audit; corporate governance; convergence points; internal control; risk management

JEL Classification: G32; G33; C39

1. Introduction

The internal audit confers the economic entity a positive role within the community, ensuring a public image, by strengthening its serious image. Romania is a member of the European Union; the companies must develop the internal audit activities if they want to successfully compete on the Unique European Market. The governance concept came out from the business environment in the main market economies, first of all as an acknowledgement of the fact that the important financial institutions have a strong influence on the growth of the societies they finance, and on the other hand, as a result of the notorious financial failures. It has been thought that if these legal entities had been more transparent and if there had

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been more efficient ways of supervising leaders' responsibility, the arising problems would have probably been less exigent.

The governance concept heads towards the developing countries, because the stock exchange listing varies and the investors strongly want to discover new markets in order to place their funds. The investors become exigent regarding the information quality and the governance standards they ask from the economic entities and the markets on which they intend to invest their capitals.

Thus, there has been a need to correlate corporate governance and the internal audit within a company, no matter what its dimensions are. The relation implies interconnection, interdependence and mutual influence.

2. The Internal Audit – Pillar of the Corporate Governance

The internal audit must be professional, independent, it must possess the resources needed for the development of its tasks according to the implemented standards, based on risk management, corporate governance control and it must create the best equilibrium between the insurance activities and consultancy. The internal audit is an essential pillar of corporate governance together with the audit committee, the risk management and the external audit.

Based on this model of corporate governance, one reaches the center of the Board of Directors of corporations, and the internal auditors have a clear way towards the Board of Directors agenda, which must function according to known and accepted rules, which reflects business transparency.

The internal auditor represents a strong ally to audit committees, being one of the parts that are trustful to offer credible and relevant information, and that it would impartial through the advice and conclusions it might offer.

The corporate governance principles impose the understanding of the necessity to implement the internal audit within the governance structures. These continuously developing expectations represent an opportunity for the superior management to search for and train internal auditors that would be able to provide a strategic judgment, which is to bring added value for the organization. The implementation of the internal audit unquestionable incorporates risk management, the internal control system and the governance processes, which are interrelated. (Ghiță, Iațco, Brezuleanu, Vorniceanu, pp. 55-56)

The published annual internal audit report must present the implemented internal control systems in order to manage the internal and external risks. Though, the Board of Directors can provide the needed information about the functioning of the internal control system by using information regarding the risk management and the reporting process, but most of the data are provided by the internal and external

audit and the audit committee. *The internal audit is the most important method of reporting the functioning of the internal control system*, the reason why the teams of internal auditors base themselves on the Board of Directors requirements, in the private sector, or on the requests of the managing director in the public sector.

The internal audit can be considered a function of the corporate governance, as it is more and more accepted as a company function, with an important role within corporate governance. It is formed within corporations as an independent and objective function, though it may also be subjective, through its human side. *This represents an independent, objective, ensuring and consulting activity, designed to create value and also to improve the operations of one company.*

It assists the company in reaching its objectives by implementing one systematic and disciplined approach for the evaluation and improvement of the risk management efficacy, the control and the governance processes. (Bunget, Florea-Ianc, Ghiță, Nicolau, Pereș, Pereș, p. 54)

In practice, every company aims at implementing the three desiderata, namely *corporate governance, risk management and internal control system*, thus *the internal audit is the key component of this corporate ideals surveillance* but it also has an important role in management education, in finding efficient solutions, the auditor must possess a deep understanding, be used to corporate governance, by being the best expert in assuming the major role within the company in order to support the management and gain the company success.

The corporate governance is an attempt to implement some risk analysis, verification, evaluation and control systems, with the object of developing an efficient management. The “corporate governance” concept is supported by the internal audit, with an important role in the assistance of the internal control system reorganization and in the general management advisory. The remaining manager requirements are the installing the system designed to prevent frauds within the company, and the responsibility of the internal audit remains the supply of its own assistance, evaluating risks, corporate control strategies, making suggestions, recommendations, lowering the fraud danger, improving the control strategy.

The economic crises generate by financial scandals on European and American ground have emphasized the fact that accounting frauds are assigned to the absence of proper control, which is provided by the companies’ internal regulations. Thus, the strong relations between frauds, corporate governance and the role of internal audit are emphasized.

3. The Role of the Internal Audit within the Corporate Governance System

The internal auditors' role is to follow the company general strategic objectives, to help it to excel in a viable, ethic manner. They evaluate and improve the agreement, control and risk evaluation systems in the company, providing the company the ability to operate with a reasonable certainty.

The data selected for the financial situation must be transparent, giving the internal auditor the possibility to elaborate suggestions concerning the way this data should be secured so that it could not be used by other individuals excepting the authorized personnel, *he must conceive the deep understanding of the society, the deep understanding of the society*, through experience and training levels and education that help individuals to evaluate business situations.

Any type of corporate governance, irrespective of the configuration method and the reference market, in order to be considered as efficient, must predict convenient control mechanisms, which are to intervene in predicaments and protect the interests of every user category. In order to define its own role concerning the ethic model of an entity, required by the corporate governance principles, the internal auditors take into consideration the following issues: (Boulescu, Gădău, pp. 191-194).

The role of the internal audit and auditor regarding the ethic model varies depending on the existence or absence of an ethical culture within the entity and depending on its development level, on the description of the nature of the entity governance process; the development of a relation between the governance process and the ethic culture of the entity; mentioning the fact that any individual in conjunction with the entity and especially the internal authors are obliged to promote and defend the ethics; specifies the features of a strong ethical model.

The company can adopt various legal forms, structures, strategies and procedures to ensure itself that it obeys the regulations in force and respects the general rules on the business environment, the ethical principles and the expectations of the civil society.

The practice adopted by the company regarding its governance represent the result of a unique and evolving culture that influences the roles, conditions behaviors, induces objectives and strategies, measures performances and defines responsibilities.

The internal audit should add values to all the activities in a company, fostering the identification and evaluation of the risks existing at any level. This should be done by evaluating the essence of the risk management economic process, hoping that there are specific clear and coherent management policies and behavioral norms.

4. The Governance – Internal Audit Relation. Convergence Points

Corporate governance includes elements such as the transparency of the internal and external audit, the existence of very precise terms for the financial reporting, managers' responsibility for the data veracity within financial reports or the total communication and transparency of the financial results. A first convergence point can be synthesized: *if the internal audit's role is to objectively evaluate risk, governance is related to the concept of risk management.*

A second converging point of view takes into account the fact that, using corporate governance, one aims at *growing the company performance and the harmonization of the various interest groups.* Following the huge rumbles in the financial environment, the final conclusion is that a more efficient company governance/management system is needed, and that this system is to be certified/evaluated through internal audit. In this case, the audit activity must take the shape of an objective examination of one company's activity ensemble, with the view of the independent evaluation of its management, of the practiced internal control, as well as of its leading processes. Corporate governance specifies the distribution of rights and responsibilities amongst various individual categories within the company, such as: the Board of Directors, the directors, the shareholders and other categories, and *sets the decision making rules and procedures regarding one company's activity, and the internal audit evaluates the quality of these decisions.*

From the third point of view, corporate governance refers to promoting correctness, transparency and responsibility within any company. All the pertinent data on the company must be presented correctly and in-time, including the financial situations, performance and propriety, both within the company and its external links. Thus, *the role of the internal audit is to evaluate how relevant the financial and non-financial are the data provided to the leading members of the economic entity,* in order to be conscious of the realities of that company and to respect the transparency principle. The fourth, the aim of the corporate governance system is to protect the shareholders' rights and their fair treatment, including the minority and the foreign shareholders. The achievement of a coherent internal audit according to the norms elaborate by the Finance and Audit Committee comes to reach this objective, *turning the shareholders into the main incumbents of these audit activities.*

From another point of view, *the risk management techniques represent the support needed for the maximization of the company values, also providing help to the objectives of corporate governance.* The financial control of the managers' activity represents an important part of a corporate governance code and it consists of minimal requirements for the managers and executive officers (risk exposure, performance indexes, etc.), for censors and auditors (employment, payment etc.). From this point of view, *the role of the internal audit is to evaluate the adequacy*

degree of the financial and non-financial controls disposed by the leaders of the economic entity, and if they are applied and to what extent, with a view to growing the efficiency of the companies' activity. The good functioning of these processes is based on the company's maturity as it requires the existence of in-time accepted decision networks and they imply a high volume of work in order to be maintained.

5. Conclusion

The implementation of strong corporate governance is vital for the fulfillment of this objective, together with the insurance policy of a transparent management, by identifying the most favorable governance system. Through the delimitation and the separation of the management process stages, but also of the executive functions from the non-executive ones, an efficient decision making system is promoted and a responsibility clarification. The clear separation of functions within a legal entity can represent the solution to high-quality governance, which allows the transparency and efficiency growth. The internal audit will be under public steam because it is the function that can bring transparency surplus in such a controversial world. Its presence in such a context corresponds both to "the principles of corporate governance", so that it ensures the transparency of organizational transactions, and to the management need to bring more safety, which allows it to correctly and efficiently put into effect the strategy of the company.

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