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**Business Administration and Business Economics**

**The Impact of Corporate Branding Dimensions on Firm Performance: Evidence from the Zimbabwean Petroleum Industry**

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**Abstract:** The study sought to establish the impact of corporate branding dimensions (mission statements, corporate visual identity and identity review) on the performance of petroleum firms in Zimbabwe. The study sought to complement other previous studies that were carried out in other different contexts by producing evidence on the same phenomenon from a developing country context. The study adopted a quantitative approach. A self-administered survey was conducted to collect data that was processed by SPSS version 21. Data analysis techniques namely descriptive, correlation and regression were used to analyze the data. This study has shown that in a developing country context, mission statements, corporate visual identity and identity review impact significantly on performance. On the other hand there is no statistical evidence to support that corporate culture and corporate communications are predictors of firm performance. The findings of the study if taken seriously can provide some invaluable insights to managers of petroleum companies in developing countries and other parts of the world about how they can leverage on corporate dimensions to ensure firm performance. The study sought to contribute to the existing body of knowledge on corporate branding by developing a comprehensive conceptual framework of corporate branding and performance, a research area that has not been exhausted in a developing country context.

**Keywords:** corporate branding; mission statement; corporate visual identity; corporate identity review, business performance

**JEL Classification:** O16

## **1. Introduction**

Over the years, corporate branding has emerged as a strategic tool for creating and maintaining competitive edge. Organizations have made a paradigm shift from focus on individual brands to consider the role of corporate brand. According to

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Abratt & Kleyn (2012), the last few decades have seen a significant growth in interest, conceptual development and empirical research in topics of corporate identity, corporate branding, corporate image and corporate reputation. Harris & de Chernatony (2001) argue that due to technological ubiquity, it is difficult for firms to maintain their positions of competitive advantage on product terms and hence their migration towards unique emotional rather than functional characteristics. Employees are thus becoming pivotal to the process of brand building and their behavior can either reinforce a brand's advertised values or if inconsistent with these, undermine the credibility of advertised messages. It is therefore crucial to look into the organization to consider how employees' values and behaviors can be aligned to the brand's desired values (Harris & de Chernatony, 2001). Corporate branding aims to create a favorable image for the organization in the face of multiple stakeholders. A strong and favourable brand according to Khan (2009) is desirable to attracting the best resources into the organization thus making corporate brand valuable mother resource to the organization from which other resources are attracted. Some of the factors that have led to the emergence of thought on corporate brand management include among others; the fragmentation of markets, globalization, the ease of imitation of product features by competition, the perceived economic advantage due to economies of scale in communications and a tool of differentiation in the face of competition (Khan, 2009). The author further suggests that strong corporate brand enables a firm to survive in the face of tough economic circumstances and gain the support of customers and investors.

Despite the sheer size of the petroleum sector, being a billion dollar sector, it has failed to provide a model of successful corporate branding. The local evidence as provided by the Marketers' Association of Zimbabwe (MAZ) who runs the Super Brand competition shows that the telecoms, food and beverage sectors have consistently featured in the top 10 local brands from 2010 to the year 2013 (Marketers Association of Zimbabwe, 2013). The evidence shows that in terms of reputation, the petroleum sector is still lagging despite its size.

Streams of research on the separate concepts that make up brand management have been done. For example, Atrill, Omrab & Pointonc (2005), studied only one component of brand management namely corporate mission statements for the 143 UK listed firms, Amran (2012) examines the company mission statement components and company performance using a sample of 429 companies from Malaysia. Rashid, Sambasivan, & Johari(2003) and Zakari, Poku, & Owusu-Ansah (2013) serve as examples of researches that focus only on the impact of culture on firm performance in Malaysia and Ghana respectively. Finally, Udegde, Ogundipe, Akintola & Kareem (2012), in a Nigerian context, explore the role of communications alone on firm performance. A gap clearly exists in the sense that there is no integrated approach to the study of corporate branding when yet it is an integrated concept straddling corporate mission, culture, communications and the

monitoring of the identity –image gap which must be closed so that the image that stakeholders have is not emergent but deliberate.

The integration of the concepts and their testing is therefore needful to guide practitioners and managers in their quest for being sustainably competitive. Additionally the researches done do not feature a country in Southern Africa and hence there is room to contribute to the body of knowledge. The current study therefore aimed to establish the causal relationship between corporate brand dimensions and firm performance exists. The study sought to contribute to the existing body of knowledge on corporate branding by developing a comprehensive conceptual framework of corporate branding and performance.

The study sought to test the following hypotheses:

*H1: Corporate mission positively influences the performance of petroleum firms;*

*H2: Corporate culture has a positive impact on the performance of petroleum firms;*

*H3: Corporate communication ensures the success of petroleum firms;*

*H4: Corporate visual identity has a positive influence on the performance of petroleum firms; and*

*H5: Corporate identity image review positively impacts on corporate performance.*

The results of the study will assist managers to improve the way they manage their corporate brands. This research project will also give fresh insights on corporate branding to the existing literature in which countries outside Southern Africa dominate the research area. The rest of the paper proceeds as follows: a review of literature on corporate branding and corporate performance will first be provided. This will be followed by a conceptual framework and hypotheses development. Furthermore, the research methodology, the results and the discussion of results are provided. The paper will be concluded by the discussion on the managerial implications, limitations and avenues for future research.

## **2. Literature Review**

### **2.1. Corporate Communications**

Einweller & Will (2002), underscored the need for an integrated approach to brand building citing corporate communications as a key ingredient. They posit that communication is made up of three facets, namely; internal communications, relationship management and market communication. In their typology, internal communication is target towards employees. Relationship management is geared to address the non –customer stakeholders that include the media, investors,

governments and the general public. The final component is targeted towards the customers covering areas of corporate design, corporate advertising, and corporate events and cooperate sponsorship. In addition to the three dimensions of corporate communications, the authors also included online communications as an integrative mode of communication that is harnessed across the three corporate communications departments.

Einweller & Will (2002) suggest an organizational structure that is meant to deliver effective communication across the three stakeholder groups. In their view a combination of centralization and team organization work best to achieve coordination and produce results. Melewar, *et al.* (2006) state that corporate communications is three fold: management, marketing and organizational communication. Management communication is about managers relaying to their employees information from the aims to the general administrative issues of the firm. Marketing communication on the other hand is designed to promote sales of goods and services. The final leg of communication emanating from within the organization is organizational communication, which comprises various activities including public affairs, environmental communications, and investor relations, labor market communications and internal communications.

Cornelissen (2000) view of corporate communications as an argumentation of other sources of communication that impact on the targeted stakeholders. In the same vein, Melewar, *et al.* (2006) posits that the traditional view of corporate communications is centered on creating an image in the minds of stakeholders but image is an intermediary process, which should lead to intentions and behavior akin to the marketing communication in which the organization seeks to persuade customers to act on its favor.

## **2.2 Corporate Visual Identity**

Corporate visual identity consists of a name, a symbol and /or logo, typography color, a slogan and additional graphic material (van den Bosch & de Jong, 2005). In the same vein, Einweller & Will (2002) state that visual identity in the form of logos and colors has an impact on identity and customers use it as a guarantee of quality when they see that symbol on the company's products. Van der Bosch, Elving & de Jong (2006), contend that, despite the ascendancy of the intangible elements of the corporate identity mix, corporate visual identity still has relevance in the way an organization presents itself to its stakeholders. They build on the earlier work of van den Bosch & de Jong(2005), stating that, key elements of a corporate visual identity are the corporate name, logo, color palette, font type, and a corporate slogan, a tagline and/or a descriptor. These visual identity elements are applied on stationery, printed matter, advertisements, websites, vehicles, buildings, interiors and corporate clothing. Finally, they view architecture as part and parcel of the visual identity. Van der Bosch, *et al.* (2006), present a number of thoughts

that are critical to the understanding of the importance of visual identity to the organization. Firstly, corporate visual identity helps to communicate the organizational values and ambitions to its various stakeholders. Secondly, they state that corporate visual identity communicates the structure of the organization to the outside world, by portraying its coherence as well as the relationship between divisions or units. Additionally, corporate visual identity helps in creating employee identification with the organization. They also view corporate visual identity as the most tangible asset for the self-expression of an organization, and hence must be viewed as an important strategic instrument within the corporate identity mix. Ditlevsen's (2012) study reveals that annual reports communicate organisation identity in visual ways. Annual reports, they contend, tell the equity story to potential and current investors of the organization. They show that annual reports are used to communicate the organization's strategy by use of symbols, icons and icons with an analytical format.

### **2.3. Mission Statements**

In the literature, mission statements are defined in a number of ways. According to Hirota, Kubo, & Miyajima (2010), mission statements as an explicit document indicating the desired future state of the organization. This definition ties well with that proffered by Desmidt, Prinzie, & Decramer (2011), who view mission statement as a formal document that articulates an organization's distinct and enduring purpose. According to Babnik, Breznik, Dermol & Sirca (2014), there are two streams of research pertaining to mission statements. The first one views mission and organizational culture as strategic tools, which enhance organizational performance. The other view is an extension of the first one and it connects the concepts of organizational culture and the strategic statements with the processes of organization's identity creation and identity articulation. On one hand the strategic view focuses on the business goals and objectives while the culture dimension focuses on organizational philosophy, identity and values giving meaning to its goals, norms, decisions, actions and everyday behavior (Babnik, *et al.*, 2014).

According to Williams, Morrell & Mullane (2014), mission statements are widely used in strategic management and commonly promoted in business strategy classes. Amran (2012) supports the strategic school by noting that mission statements have become popular due to needs by businesses to develop realistic business objectives and strategies that can be achieved within their capacity. Clear articulation of mission is seen as vital to the development of realistic strategic objectives (Atrill, *et al.*, 2005). A strong mission is one in which norms and values are widely shared and intensely held throughout the organization (Hirota, *et al.*, 2010). A number of benefits accrue to an organization that uses mission statements and these include; providing a sense of organization's direction and purpose, focuses the allocation of organizational resources, communicating effectively with

important internal and external stakeholders and describing the values of the organization that will guide and inspire the members (Desmidt, *et al.*, 2011).

#### **2.4. Corporate Culture**

Literature indicates culture as predominantly a set of dominant values, norms, beliefs, assumptions that are held by the organization's members (Rashid, *et al.*, 2003, Weber & Taiba, 2012; Ortega-Parra & Sустre-Castillo, 2013). Thus taken together we can view culture as an invisible force that has its roots in the assumptions, beliefs, norms and values of organizational members and acts in such a way as to regulate behavior. A four level categorization of culture is presented by Souza-Poza, Nystom & Wiebe (2004). The four elements include people, outward, inward and task cultures. In this case the people culture is one in which the organization is viewed as an extension of the family. The outward orientation is characterized by a head who is a hard driving competitor, a risk taker. Consequently the company aims for market leadership and innovation thrives. For the inward –oriented organizations, the emphasis is on structure and formality with formal procedures. There is implicit implementation via rules and explicit via norms and values. Finally the task-oriented culture regards highly the tasks that are to be performed, the result of which is efficiency and lower production costs. Weber & Taiba (2012) categorizes culture based on approach to innovation, approach to risk, horizontal relationships, vertical hierarchical contact, autonomy and decision-making, approach to performance and rewards.

#### **2.5 Identity-Image Review**

According to Williams, *et al.* (2014), there is a need to periodically review the mission statement to ensure that it is serving its intended purpose. A mission statement that directs behavior is desirable otherwise, it would be just a paper written without an impact on the business outcomes. Also according to Williams, *et al.* (2014), external forces in the competitive environment will necessitate a change of strategy and with it a change of mission. The need to survey stakeholder perceptions about the brand is echoed by Murphy, Maguiness, Prescott, Wislang, Ma & Wang (2005), who posits that today's behavior is a reflection of yesterday's attitudes and similarly today attitudes reflect the behavior of tomorrow. They present a tool, called stakeholder performance appraisal in which the representative sample of the five key stakeholders to the organization – employees, suppliers, customers, the community and shareholders, appraise the organization in three result areas. These areas cover the triple bottom line of the organization that is economic, social and environmental performance.

#### **2.6 Performance Measures**

Literature reveals a number of performance measures that fall into financial and non-financial categories and into the corporate level and individual level

performance indicators. The measures return on equity, stock returns, return on assets, earnings per share, net profit margin, return on investment, financial equilibrium, gross income, growth in income and size of profit dominate the financial measures of performance (Atrill, *et al.*, 2005; Amran, 2012; Lyons & Sufi, 2003; Hirota, *et al.*, 2010; Rashid, *et al.*, 2003; Pinho, Rodrigues & Dibb, 2004). Non-financial measures of performance at the corporate level include quality of working environment, perceived social image, quality of products/services, quality of customers, quality of customer service, adaptability, staff turnover and people development (Pinho, *et al.*, 2014; Lund, 2003; Tseng, 2010). Individual performance indicators used in literature include job satisfaction, role clarity, communication quality, fit with organization and behavioral conformity (Balthazard, *et al.*, 2006; Lund, 2003). Indeed (Tseng, 2010) is persuaded that financial measures are inadequate in measuring firm performance and adopts the performance indicators due to Maltz, Shenhar & Reilly (2003). The indicators of performance include financial performance, market/customer, process, people development and future.

### 3. Conceptual Framework and Hypothesis Development

In order to empirically test the proposed influence of corporate branding dimensions on corporate performance, a conceptual framework is developed premised on the reviewed corporate branding literature. Figure 1 depicts the relationships between these variables.

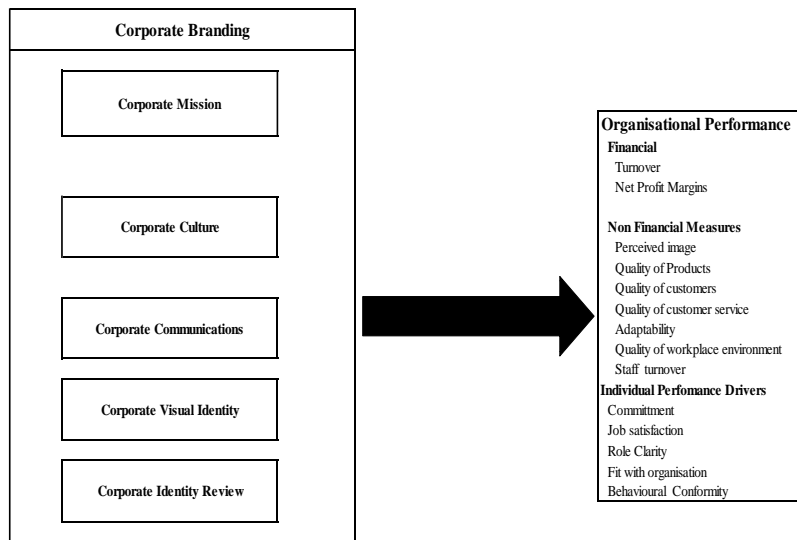


Figure 1. The conceptual framework

In this conceptualized model, corporate branding dimensions namely, corporate communications, corporate culture, corporate mission, corporate visual identity and corporate identity review are the independent variables and corporate performance is the dependent variable. The proposed relationship between the variables is that the use of these corporate branding dimensions positively influences corporate performance.

#### **4. Research Methodology**

The study adopted the quantitative research design which helped in quantifying the impact of corporate dimensions on the performance of the petroleum industry in Zimbabwe and to generalize the results to a wider population Uddin & Hamiduzzaman (2009).

##### **4.1 Population and Sampling Techniques**

The population under study is the employees and senior managers of the petroleum industries who are located in Harare. There are five major players in the petroleum sector in Zimbabwe. An estimate of the number of 250 was drawn from the five firms with equal number of questionnaires, fifty per firm, sent to each company.

##### **4.2 Research Instrument**

A self-administered questionnaire instrument was administered to the target sample both physically and electronically. A Likert-type scale was used to rank each of the corporate branding dimensions and the performance measures and the choices ranged from 1=Strongly Agree to 5=Strongly Disagree.

##### **4.3 Data Analysis**

The data collected in this study was analyzed by using both descriptive and inferential statistics. Both correlation and regression analyses were conducted to analyze data that were processed by SPSS version 21.

#### **5. Results**

The sample had more males than females, with the former constituting 62.1% respondents and the latter 37.9% of the respondents. The results also show that graduates have considerable presence in the petroleum sector. This is justified by the fact that 40% of the respondents have a Bachelor's degree as their highest qualification, closely followed by those with Masters Degrees, 24%, followed by those with a Diploma (16%), Certificate (14%) and lastly a Higher National Diploma (6%).



### 5.1 Reliability and Validity

Having established the distribution of the respondents, reliability tests of the instruments were conducted. The overall scale reliability of the instrument had a Cronbach's alpha coefficient of 0.88, which was well above the threshold of 0.7. As depicted in Table 1 all the variables attained the benchmark of a Chronbach's alpha coefficient of 0.7. This result demonstrates that the individual scales were all reliable. The validity of the questionnaire was ensured by consulting two practitioners and an academic in the corporate branding field in order to check for relevancy or ambiguity in the wording of the questions. In addition the questionnaire was also pilot tested to check for questions that were not clear or irrelevant. The two-stage verification process helped in the purification of the instrument.

**Table 1. Detailed reliability statistics**

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Mission Characteristics	28.26172856	23.23888406	0.525217377	0.87
Corporate Communications	28.93404657	21.2478786	0.571912391	0.87
Corporate Culture	28.77806513	20.6605357	0.742635402	0.85
Corporate Visual Identity	28.50002358	20.77521476	0.785167944	0.85
Corporate Identity Review	28.75008105	19.77021216	0.656701108	0.86
Individual Performance	28.01215001	22.24314037	0.631658098	0.86
Non-Financial Firm Performance	28.34904657	21.70500134	0.839058744	0.85
Financial Firm Performance	28.8707707	24.10749097	0.238348164	0.90
Total Corporate Performance	28.30335691	22.0771189	0.852822802	0.85

### 5.2 Correlation Analysis

A non-parametric correlation tests called the Spearman's rank correlation "rho" was used to test the association between the variables. Correlation takes range from -1.0 for a perfect negative relationship to +1.0 for a perfect positive relationship. The table 2 below shows the level of association between the variables. Taken together, there is no problem with multi-co-linearity, as the significant correlations are all less than 0.8 (Willis & Perlack, 1978). The results show that corporate performance is positively and significantly correlated to all the independent variables and the coefficients range between 0.355 and 0.917.

**Table 2. Correlation analysis**

	Correlations(Spearman's rho)								
	1	2	3	4	5	6	7	8	9
Mission Characteristics (1)	1								
Corporate Communications(2)	.289*	1							
Corporate Culture (3)	.396**	.637**	1						
Corporate Visual Identity(4)	.381**	.520**	.639**	1					
Corporate Identity Review(5)	0.195	.431**	.580**	.573**	1				
Individual Performance(6)	.387**	.268*	.561**	.451**	.403**	1			
Non Financial Firm Performance(7)	.425**	.513**	.681**	.628**	.573**	.636**	1		
Financial Firm Performance (8)	0.128	-0.059	-0.015	0.164	.259*	-0.055	0.196	1	
Total Corporate Performance(9)	.412**	.375**	.650**	.597**	.572**	.786**	.917**	.355**	1
*. Correlation is significant at the 0.05 level (1-tailed).									
**. Correlation is significant at the 0.01 level (1-tailed).									

### 5.3 Regression Analysis

Having established the direction of association and strength of the relationships between the variables, the study further conducted regression analysis because correlation analysis assisted in only determining the association but not causal relationships between the variables. The researcher sought to understand the extent to which independent variables (mission characteristics, corporate culture, corporate communications, corporate visual identity and identity review predict the outcome variable (corporate performance). The results of the regression tests are shown in Table 3 below.

**Table 3. Regression analysis**

Model		Coefficients(a)				
		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.44	0.343		4.201	-
	Mission_Characteristics	0.238	0.098	0.274	2.423	0.019
	Corporate_Communications	-0.034	0.085	-0.055	-0.4	0.691
	Corporate_Culture	0.051	0.116	0.074	0.443	0.659
	Corporate_Visual_Identity	0.24	0.109	0.327	2.196	0.033
	Corporate_Identity_Review	0.153	0.073	0.278	2.114	0.039
a. Dependent Variable: Total_Corporate_Performance						

Dependent Variable: Corporate performance, R-squared =0.533, Adjusted R-squared = 0.488, F = 1.87. \*significant at  $p < 0.01$

Table 3 depicts that the goodness of fit of the model is satisfactory with an adjusted R-squared value of 0.488 which demonstrates that 48% of the variance in performance of petroleum firms is explained by mission characteristics, corporate communications, corporate culture, corporate visual identity and corporate identity review. The F value of 11.87 and a p-value of 0.00 indicate that the regression model is significant to predict corporate. The standardized coefficients of mission characteristics ( $\beta=0.274$ ;  $p < 0.05$ ), corporate visual identity ( $\beta=0.327$ ;  $p < 0.05$ ) and corporate identity review ( $\beta=0.278$ ;  $p < 0.05$ ) respectively are positive and significant all. However, corporate communications ( $\beta= -0.055$ ;  $p=0.691$ ), and corporate culture ( $\beta=0.074$ ;  $p=0.659$ ) showed no significant influence on corporate performance.

## 6. Hypothesis Testing and Discussion of Results

The first hypothesis (H1) stating that mission characteristics positively impact on corporate performance is in line with the results of this study. This result is in agreement with that of Bart, *et al.* (2001) who report a positive causal relationship between mission statement and performance. The result resonates as with the findings of Hirota, *et al.* (2010) who report a positive causal relationship between mission and firm performance. Therefore the results confirm the hypothesis.

The second hypothesis stated that corporate culture has a positive effect on corporate performance has not been confirmed by the results of this study. The finding of this study shows that culture does not influence performance. This result contradicts the results of other studies which show that culture is a significant explanatory for performance (Rashid, *et al.*, 2003, Pinho, *et al.*, 2014 and Moradi, *et al.*, 2013) who show that culture is a significant explanatory for performance. The result also goes against the postulation of Ahmed and Shafiq (2014), who stated that all dimensions of culture influence the different perspective of organizational performance.

The results of the study accept H3 which postulated a positive predictive relationship between corporate communications and corporate performance. The results reveal that corporate communications have a positive effect on the individual level, non –financial corporate level and the total performance measure. On the other hand, corporate communications is not associated with financial performance indicators. This result agrees with that of Udegde, *et al.* (2012) who report positive correlations between business communication and business performance. Additionally the study supports the work of Asamu (2014) that shows that the level of communication effectiveness had positive correlations with worker's performance, worker's productivity and worker's commitment.

With regards the corporate visual identity, the finding also confirm H4 which proposed that corporate visual identity has a positive impact on corporate performance. This finding supports the Melewar (2001) who show that corporate visual identity supports sales. This agrees as well with the postulation of Einweller and Will (2002) who posit that customers use corporate visual identity as a guarantee of quality and thus results in customer loyalty and repeat purchases. The study supports the postulations of Van den Bosch, *et al.* (2006) who also found that corporate visual identity is a predictor of corporate performance.

Corporate identity review also emerged as significant determinant of corporate performance. This finding supports Balmer (1995) postulation that monitoring the corporate identity and taking corrective actions will avert potential losses due to misdirected advertising efforts. This finding also supports Cornelissen (2004) who argued that organizations cannot myopically focus internally on their identities alone and trust that, based on their identities, will achieve glowing reputations.

## **7. Recommendations**

Based on the evidence of this study, managers in the petroleum sector should leverage on their mission statements, corporate visual identity and the reviewing of their identity to ensure that stakeholder interests are satisfied in driving performance. The managers should take stock of the cultures obtaining in their

organizations and relook at the communications strategies to convert them to strategically important assets.

## 8. Limitations of the Study

While the study attempted to make an analysis of the predictors of corporate performance in the petroleum industry, a similar research problem can also be investigated in other industries to enable comparison of results. More so, it might be essential to repeat the same study at different time periods so as to check for consistence of results given that the petroleum industry in Zimbabwe is very dynamic. A quantitative research design was employed for the study. It will be worthwhile to carry out the same study using qualitative or triangulation methodology. Nonetheless, the findings of this study and the suggested future avenues of study can contribute in generating new knowledge to the existing body of corporate branding literature in a developing country context.

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## Promotional Strategy Impacts on Organizational Market Share and Profitability

Adesoga Dada Adefulu<sup>1</sup>

**Abstract:** The paper examined promotional strategy impacts on market share and profitability in Coca-Cola and 7up companies in Lagos State, Nigeria. Survey research method was adopted. The study population was the staff in marketing positions in the selected companies. Questionnaire was administered on the samples from Coca-Cola and 7UP companies. The statistical tool employed was the univariate analysis of variance (ANOVA) to determine the statistical significance and the extent to which promotional strategy brings about variation in market share and profitability in the selected companies. The study revealed the need for a better understanding of the organizational factors that determine the commitment of organizational resources to drive the achievement of marketing goals. In addition, promotional strategy measured by advertising, publicity and sales promotion affected market share and profitability at different percentage rates while Personal selling did not. The study concluded that promotional strategy suitable to a business caused variations in market share and profitability. Managers concerned about maintaining competitive edge in the market may find it appropriate to begin by examining promotional strategy adoption. Suggestions are also made for further research and study limitations are denoted. Researchers are encouraged to devote efforts to identifying what variables may modify the nature of relationship?

**Keywords:** market share; profitability; promotional strategy; soft drink companies

**JEL Classification:** M3; M31; L25

### 1. Introduction

At the heart of business, nowadays, is the competition to attract consumers' attention towards products or services. Consequently, each producer needs to build a more attractive strategy and action plan than its competitors. One prominent tool of attracting consumers' attention towards products is promotion. According to Chaharsoughi and Yasory (2012) Promotion is one of the key factors in the marketing mix and has a key role in market success. Promotion is used to ensure that consumers are aware of the products that organization is offering. It is the process of establishing communication relationship between a marketer and its publics. Marketing promotions is quite different from mass communication, in

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which an organization addresses largely undifferentiated mass audience for non-commercial purpose by such means as press editorials, radio news, and television. Under marketing promotions, an organization would be aiming at a deliberately differentiated audience for a commercial purpose and would employ such means as advertising, personal selling, sales' promotion, publicity and public relations.

Promotion involves disseminating information about a product, product line, brand or company. It is one of the four key aspects of the marketing mix. Adetayo (2006) opined that promotion seeks to inform, remind and persuade target consumers about the organization and its products. He further argued that promotion is often used to help an organization differentiate its products from rivals. A promotion campaign is an inter-related series of promotion activities designed to accomplish a specific objective. The obvious goal of promotion management is to ensure that all the individual elements of promotion mix work together to accomplish the organization's overall promotion activities.

An Organization adopts different processes or strategies to disseminate information about its product, product line, brand or company. These various processes are described as the promotion strategy.

A Promotion strategy can be considered as a process whereby information about the organization's products or services is encoded into a promotional message for delivery to the customer. In effect, firms have a variety of alternative information delivery system available to them, which can be used to construct an appropriate promotional mix strategy. This portfolio of alternative delivery mechanism includes majorly; advertising, personal selling, public relations, publicity, direct marketing and sales' promotions.

Marketing decision makers are increasingly aware of the importance of the shareholder's value maximization, which calls for an evaluation of the long term effects of their actions on product-market response. (Amit and Dominique, 2010). The quest of the decision makers to determine the influence of their strategic relations with their environment together with having sustained competitive edge in the market has called for the evaluation of the influence of promotional strategy on market share and profitability. Marketing literature to date has focused on the sales results of marketing actions. (Amit and Dominique, 2010). The relative importance of marketing strategy on market share and profitability of companies have not been focused. It is therefore the objective of this paper to examine the impact of marketing strategy on market share and profitability of the selected companies. The research will equally answer the question: What is the impact of promotional strategy on market share and profitability of Coca-Cola and 7up Companies?

Following this introduction, section two of the paper considered the review of Literature, section three discussed the methodology of the paper, and section four

presented the analysis, results and discussion while the last section dwelled on the conclusion and recommendations.

## **2. Literature Review**

### **2.1 Conceptual Framework**

The independent variable in the study is Promotional Strategy. It is the combination of the different channel that can be used to communicate the promotional message to the consumers. The channels to be used are advertising, public relations and publicity, personal selling, sales' promotion and direct marketing tools that the company uses to persuasively communicate customers' value and build customer relationship. (Armstrong and Kotler, 2009)

Asikhia (2000) viewed marketing promotion strategy as the design and management of a marketing sub-system for the purpose of informing and persuading present and potential customers and clients. The promotional elements are organic, for example, advertising can be seen as the taking of the horse to the stream while personal selling is forcing the horse to drink some water

Osuagwu (2002) submitted that promotion strategies are of substantial importance in the efficiency and effectiveness of a company's marketing efforts. He further argued that marketing promotion elements play varying roles towards the achievement of corporate marketing goals and objectives. Adetayo (2006) opined that the overall promotion effort usually includes several individual promotion campaigns. He defined promotion campaign as an interrelated series of promotion activities designed to accomplish a specific objective. The goal of promotion management according to Adetayo (2006) is to ensure that all the individual elements of the promotion mix work together to accomplish the organization's overall promotion activities.

According to Enikanselu (2008) company that wants more than "walk in" sales must develop an effective program of communication and promotions. Successful promotion is an essential ingredient in marketing strategy. Prospective buyers must learn about both the products' distinctive wants satisfying characteristics and its availability. Establishing and maintaining communications with target market segment are the main tasks assigned to marketing promotion. Osuagwu (2002) identified the objectives of promotion as information, stimulation of demand, product differentiation, accentuating product value, and maintain stable product sales. The elements of marketing promotions mix are involved in communicating information to customers, clients or potential users about goods or services on offer. Their fundamental aim is to prompt customers, clients or potential users to take positive action by placing orders, making enquiries and purchasing on a continuous basis. The elements in the promotional mix are not mutually exclusive.

A firm will require some mixture of two or more of them depending on the type of product or service including its life cycle; the market competitions, the marketing promotions' objectives, among others. The amount of money available and other resources of the firm will also affect an organization's promotional mix. The promotional tools in promotional strategy describe the tools or weapons available to the marketing communicator whose major role is persuasive communication. The two most prevalent promotional elements and the most important in terms of marketing cost and impact are personal selling and advertising. Other elements of promotion are publicity, sales' promotion though of less importance, but in certain situations make significant contributions. Various authors in their books and presentations essentially focused on these four main promotional tools (Perner 2008; Osuagwu 2002; Adetayo 2006), and Smith and Taylor (2002). Each of the elements is briefly described. Armstrong and Kotler (2009) defined personal selling as personal presentation by the firm's sales force for the purpose of making sales and building customer relationship. Enikanselu (2008) opined that personal selling involves two or more persons communicating directly with each other face to face, and person to audience.

Advertising is any paid form of non-personal communication about an organization, good, service or idea by an identified sponsor (Berkowitz et al., 2000). Sales promotion represents an eclectic collection of various promotional incentives designed to stimulate volume or speed of purchase. (Blattberg & Neslin, 1990)

Fiske (1980) defined public relations as a form of communication management that seeks to influence the image of an organization and its products and services. Public relations usually focus on communicating positive aspect of the business. Enikanselu (2008) described Publicity as a non-personal form of demand stimulation and is not paid for by the person or organization benefiting from it.

Market share and Profitability are the two dependent variables in the study. Market share is one of the marketing metrics that is constantly talked about in the field of marketing as a discipline. Market share compares the revenue of the firm with the total revenue of the market in question over a period of time. It is calculated as below;

$$\text{Market Share (\%)} = \frac{\text{Company sales in period (t)}}{\text{Total sales within feasible market in period (t)}} \times 100$$

The purpose behind measuring market share is to establish the relative position or share of the firm within the broader market place. And in relation to this study, the share of the firm in the market will be determined in relations to the extent of the promotional strategy. In effect it helps to understand the relative success of the firm in penetrating the market place, thus the relative market share of a company attempts to compare a firm's market share with that of its nearest rivals.

Profitability on the other hand is the primary goal of all business ventures. Without profitability, the business will not survive in the long run. Profitability is measured with income and expenses and normally divided into gross profit and net profit. Gross profit as a marketing metric refers to the profit generated by a firm. It is calculated as the total sales minus the cost of those sales. The net profit is a financial metric that is equally important to the marketing manager. It is synonymous with “bottom line” and indicates whether, after all the expenses of the firm have been taken into consideration, the company is still making profit. The net profit margin is the marketing metric that represent the ultimate profitability of the firm expressed in percentage and it is useful in comparing one period against another or comparing one company with another. This is represented as below;

$$\text{Net profit margin (\%)} = \frac{\text{net profit}}{\text{Firm's turnover}} \times 100$$

## 2.2 Empirical Studies

Study on the effect of promotional strategies on performance revealed a positive correlation between promotional strategies and sales performance. Alphonse, Victor, Fredrick, Patrick, Beatrice, and Odhiambo, (2012) It was reported that at 5% level of significance, there was positive relationship between the promotional strategies and profits because as the costs on the promotional strategies increased so did the profits.

Grankvist, Kollberg, Peterson, (2004) in their study in which they focused on promotional strategies for banking services, concluded that all elements of promotion mix were used to some extent for promotion of banking services. This view was supported by Ananda & Murugaiah (2003) who carried out similar study on financial industry and recognized the importance of promotional strategy in influencing performance in the sector. In his finding, Kristina (2006) recommended that promotional strategies should be designed as per the nature of services to be promoted. The impact of promotional strategy was further noted by Channon (1985) when he opined that promotion attract deal oriented consumers who are likely to switch banks rather than new long accounts.

Mohd & Wannur (2012) in their study noted that personal network promotional tool comprised of promotion through family / friends (asking friends or relatives to advertise), sales promotion (special sale price, purchase with purchase, giveaway with purchase and free sample) and distributors (which moving around office, schools, clinics, houses and any premises showing the products) have impact on performance. In the study conducted among women in Kenya by Arvinlucy (2012) it was found that most women groups use personal selling in promoting their products. This was due to the fact that other promotional elements require a lot of money and the groups do not have sufficient fund to carry out those other promotional elements. Advertising was only used once by the groups providing

services just to create awareness of their existence so that they may get donors to fund their activities. The different elements of the promotional strategy impacts on performance was also noted in the previous studies.

Chalarsoughi and Savory (2012) in the study on effect of sales promotion as a tool on customer attention to purchase concluded that introducing Khodro's products through sales' promotion attracts customer's attention to purchase. 50% of the participant selected the agreement choice believing that sales' promotion will bring about customers attention and promotion of selling. Fornell, Robinson, and Wernerfelt (1985) argued that sales' promotion can play a dual role in that it can be involved in both "habit formation" as well as in "habit destruction".

Metwally (1997) explained the variations in the growth rates of advertising expenditure of consumer goods and services in Australia during the period 1975-1995 by developing and testing a number of hypotheses. The regression results indicate, among other findings, that the growth in advertising expenditure is strongly correlated with the growth in sales and that movement in market shares exerts a significant effect on the growth in advertising expenditure. This view was corroborated by Dekimpe and Hanssens (1995) who used the Vector Auto Regressive modeling to show that temporary increases in advertising have a long term carry over effect on the brand's performance in some, but not all the stores. Andras and Srinivasan (2003) highlighted the importance of higher advertising intensity in performance especially profits. The view of Joshi and Hanssens (2004) was not different from Andras and Srinivasan who concluded on the impact of advertising and R&D spending on sales and profits and also went on to show that there is a positive impact of advertising on market capitalization.

### **2.3 Theoretical Framework**

The frameworks discussed below are used to explain how consumers' behaviors are influenced by the operations of promotional strategy in provoking purchase action on the part of the consumers.

#### **2.3.1 The Hierarchy of effects theory, (Lavidge and Skinner), cited in Osuagwu, (2002).**

The theory describes the effectiveness of promotion to jump- start the sequence of events needed before a consumer will buy a product and ultimately achieve the marketing objectives. The theory describes six steps:

Awareness: the individual is aware of the products' existence.

Knowledge: the individual knows what the product offers.

Liking: the individual has favorable attitudes towards the product

Preference: the individual's favorable attitudes have developed to the point of preference.

Conviction: preference is coupled with a desire to buy and confidence that the purchase would be used.

Purchase: attitude is translated into actual buying behaviors.

The consumer must first be aware that the product exists. He or she must then be motivated to give some attention to the product and what it may provide in the next stage, the need is for the consumer to evaluate the merits of the product, hopefully giving the product a try. A good experience may lead to continued use. It should be noted that the consumer must go through the earlier phases before the later ones can be accomplished.

The basic of value of hierarchy of effect is its usefulness to determine appropriate marketing communication strategy and the evaluation of communication efforts.

**2.3.2 Planned Behavior Theory:** According to the Planned Behavior Theory, behavior may be modified by sales promotion stimuli, which change beliefs, attitudes and eventually intentions and behavior. If the intervention influences customers, it changes intentions and eventually changes the behavior. The relevance of the theory is that a worthwhile promotional incentives from the organization influences the behavior of the consumers to buy

### **2.3.3 Framework for understanding sales acceleration/performance**

This framework was developed by Blattberg, Eppen and Lieberman (1981). Blattberg et al. (1981) applied the economic theory of the household or the consumer a production unit and propose a promotional model based on inventory control. The framework is concerned with purchases by an individual household of a particular product category. The following terms are first to be defined in order to appreciate the framework:

Qc: the quantity of products purchased by the household at the current purchase occasion.

Ec: the inter-purchase rate between the current purchase occasion and the previous occasion.

Lc: the level of household inventory of the product category that existed after the previous purchase.

The household inventory level is a direct result of the previous purchase quantities and inter-purchase times for purchase occasions. In turn, we hypothesize that the level of household inventory will have a direct impact on subsequent inter-purchase time and the next quantity purchased. If the level of household inventory is larger than usual, we hypothesize that the inter-purchase time to the next purchase will be larger. That is, if the household inventory is large, it can afford to wait longer until the next purchase.

The issue in the framework is, to what extent product promotion strategy will affect the quantity of products purchased at the current purchase occasion and the inter-purchase rate.

### 2.3.4 Market Share Theory

In most mature markets, three to five companies hold around 70% of the market. The remaining 30% of the market is usually divided among (frequently thousands) of very small firms. If the organization is one of the large firms, it should stay in its market, provide a broad product line, and compete using Porter's low cost strategy. If the organization is one of the small firms, it is at a significant scale disadvantage and generally should not attempt to compete head-on with the large firms. Small firms should redefine part of the large market into a smaller market (a niche). Such a redefinition would be consistent with Porter's focus or differentiation strategies. After redefining, the company would then be one of the large companies within the smaller market, and should follow the large company strategy within the market.

## 3. Methodology

To determine the impacts of promotional strategy on market share and profitability in the selected organization, a survey research was designed. Primary data were collected from Nigerian Bottling Company (NBC) and Seven-Up (7UP) Bottling Company, Lagos, Nigeria. The population of study were the people in marketing positions in the selected companies totaling 220. (NBC- 120, 7UP- 100). The two dominant players were selected because of their active and intensive engagement of promotional strategy as a strategic tool to gain competitive edge. A sample size of 172 (NBC-90, 7UP-82) determined by Yamane formula was selected using stratified sampling technique to accommodate different levels of positions occupied by the commercial staff of the organization. The questionnaire was developed based on existing literature and pretested with selected marketing staff to ensure clarity and comprehension, as well as to gauge average completion time. Minor revisions were made in question wording and order as a result of the pretest. Because of careful monitoring, the total of 172 questionnaires were returned representing 100% response rate. To assess the internal consistency of the instrument, Cronbach's alpha was run and a reliability coefficient of 0.836 resulted. The instrument was validated through content validity. The instrument was structured and multi-chotomous in design using the Likert scale type of responses ranging from Not at all, to very slight extent, to a moderate extent, to a great extent and to an extreme extent. The Yamane formula adopted in the determination of the sample size is stated below:

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

Where  $n$  is the sample size,  $N$  is the population size and  $e$  is the error margin calculated at 0.05%. Inferential statistics was used to determine the impacts of promotional strategy on market share and profitability in the operations of the selected companies. Regression was the analytical tool used to investigate the independent variable impact on the dependent variable. The outcome of the determination was used to make decision

### 3.1 Operationalization of Variables

The two variables are: Promotional strategy ( $X$ ) as independent variable, Market share ( $Y_1$ ) and Profitability ( $Y_2$ ) as dependent variables. Therefore  $Y_1, Y_2 = f(X)$ .  
 $X = f(X_1(\text{sales promotion}), X_2(\text{advertising}), X_3(\text{publicity}), X_4(\text{personal selling}))$

### 3.2 Model Specification

The model for empirical statistical analysis is based on the assumption of a linear functional relationship between promotion strategy  $\{X\}$  and market share  $\{Y_1\}$  as well as profitability  $\{Y_2\}$ , that is,  $Y_1 = f(X)$ ,  $Y_2 = f(X)$ . Therefore, the model specification for market share as well as profitability is as stated:

$$Y_1 = \beta_0 + \beta_1 X + \mu_1$$

$$Y_2 = \alpha_0 + \alpha_1 X + \mu_2$$

Considering the promotional strategy and the assumed underlying impact on market share and profitability, this enabled us to explain empirically examine the link between promotion strategy and market share

as well as profitability.

### 3.3 Model Expectation

We expect some size of market share and profitability at zero promotional strategy.

We also expect promotional strategy to correlate positively with market share and profitability.

Therefore, the a priori expectations are:

$$\beta_0 > 0, \beta_1 > 0; \alpha_0 > 0, \alpha_1 > 0$$

### 3.4 Model Estimation Technique

To obtain the numerical values of parameters of the specified linear models, the functional relationship between promotion strategy and market share as well as profitability, the ordinary least squares (OLS) technique using computer software for empirical statistical analysis, { statistical package for social science, (SPSS). }



The output yields numerical estimates of model parameters and other relevant statistics that enhance further analysis/evaluation. The outcome of the result is presented, discussed, and recommendations are made thereafter.

### 3.5 Method of Model Evaluation and Test of Hypothesis

For the test of significance of the effects, the Analysis of Variance (ANOVA) was used to determine the variation caused in market share as well as profitability by promotional strategy ( $r^2$ ).

### 3.6 Significance Value

P value < 0.05 – Significant

P value > 0.05 – Not Significant

### 3.7 Model Explanatory Power

The evaluation determined the explanatory power of the model. It is a means of the extent to which variations in the explained variables are explained by the explanatory variable. Thus, it expressed reliability and goodness of fit of the model parameters in explaining variability in the independent variable. The relevant statistics are the R-Squared ( $R^2$ ) and adjusted R-Squared ( $R^2$ ).

## 4. Results, Analysis and Discussion

**Table 4.1. Results and Analysis of the impacts of Promotional Strategy on Market Share and Profitability**

Market Share(1)								
Promotional Strategy	NBC				7 <sup>up</sup>			
	Df	F	Sig	R <sup>2</sup>	Df	f	Sig	R <sup>2</sup>
Sales Promotion	13	3.210	0.001	0.357	13	2.658	0.006	0.377
Advertising	15	2.905	0.001	0.374	15	2.206	0.017	0.376
Publicity	14	4.124	0.000	0.438	14	3.505	0.000	0.467
Personal Selling	9	1.829	0.076	0.172	8	1.268	0.277	0.141
Profitability(2)								
Sales Promotion	13	5.010	0.000	0.468	13	1.465	0.160	0.254
Advertising	15	3.512	0.000	0.423	15	2.396	0.010	0.400
Publicity	14	4.819	0.000	0.480	14	3.310	0.001	0.457
Personal Selling	9	5.479	0.000	0.387	8	1.824	0.090	0.193

*Field Survey, 2013*

The result of the analysis of the impact of promotional strategy on market share and profitability for the selected companies provide support for the research objectives and the research questions set out in the study. The result shows that in NBC, there is a statistically positive significant effect of sales' promotion as a tool of promotional strategy on market share ( $P < 0.05$ ). The variation in market share which accounted for 35.7% was caused by sales' promotion.

Advertising as a promotional strategy tool has statistically significant effect on market share ( $P < 0.05$ ). 37.4% variation in market share is explained by advertising. Publicity as a component of promotional strategy has a significant effect on market share ( $P < 0.05$ ), the variation in market share (43.8%) is explained by publicity.

Personal selling is not of significant effect on market share ( $P > 0.05$ ). The variation in market share explained by personal selling is at the level of 17%.

In Seven Up Bottling Company Plc, sales' promotion as a tool of promotional strategy has no statistically significant effect on market share ( $P > 0.05$ ). Surprisingly, the variation in market share brought about by sales' promotion is at a level below average (37.7%). Advertising and publicity have significant effects on market share. The p-values for the two elements of promotional strategy are less than 0.05. However, the variation brought about in the market shares are at different levels. Advertising impacted market share by 37.6% while Publicity impacted market share by 46.7%. The personal selling is of no significant effect on market share ( $P > 0.05$ ). The variation brought about in market share by personal selling was 14% which is generally low to the contribution of the other promotional strategy tools discussed.

The effect of the promotional strategy on profitability is also expressed below:

In NBC, each promotional tool (sales promotion, advertising, personal selling and publicity) has statistically significant effect on profitability ( $P < 0.05$ ). It is apposite to note that the degree of impact for each of the promotional tools on profitability varies from 38.7% to 48%. The highest impact coming from publicity, closely followed by sales promotion (46.8%). The lowest impact comes from personal selling (38.7%). In Seven Up Bottling Company Plc, advertising and publicity have significant effects on profitability ( $P < 0.05$ ). The variations attracted by the two elements stand at 40% to 45.7%. Sales' promotion and personal selling have no significant effect on profitability ( $P > 0.05$ ). This is evident in the variations brought about by the two elements on profitability. Personal selling (19%) and sales promotion (25%)

## **5. Conclusion and Recommendations**

The study findings generally resonate with the results of Alphonse, Victor, Fredrick, Patrick, Beatrice, and Odhiambo, (2012) and Grankvist, Kollberg, Peterson, (2004). It also offers more support for the robustness of the frameworks examined in the study. The importance of the impact of promotional strategy on market share and profitability in the selected companies suggests the need for a better understanding of the organizational factors that determine the commitment of organizational resources to drive the achievement of marketing goals. The significant effect of the adoption of promotional strategy in the selected companies does not only reflected in improved market share size and increased bottom line but has also shown that the customers and the society at large benefitted from the product information that are communicated to the markets. Promotional strategy therefore provides Soft drink companies with the ways to effective connect with their target market in order to consequently improve the fortune of their business or organization and as well gain competitive edge in the market over their rivals .The findings reveal that promotional strategy is potent tool to influence performance in the organization and equally a strategic option that could determine the survival of any organization in her drive and quest to achieve marketing objectives. The findings reveals further that promotional strategy affected market share and profitability in the selected companies differently and at significant level. The study therefore recommends that organization in their promotional strategy plan should identify which of the promotional tools the customers responds to favorably and ensures resources are concentrated on sales promotion, advertising, and publicity to maximize returns on promotional strategy expenditures. The use of the promotional strategy tools should be determined by the promotional objectives to be achieved, market share or profitability. In addition, promotional budgets should be enhanced to further strengthen the impact of the adopted tools on market share and profitability. The methods adopted in the study could be utilized by managers to analyze their market performance. The study results thus provide strong support for the basic proposition that promotional strategy influences the overall performance of soft drink companies in Lagos state. The study's findings support the call for more targeted training interventions where operations of marketing staff are core to the survival of the implementations of the promotional programs. Skills interference by means of training is recommended

## **6. Limitations and Further Research Direction of the Study**

From the methodological point of view, the limited numbers of people at the marketing position could impose some limitations to the external validity of the findings. More so, since it is a cross sectional data, the results might not be interpreted as proof of a causal relationship but rather lending support for the

previous causal scheme. The study's results are based on selected soft drinks in the Lagos state; therefore the study's findings have limited generalizability. When investigating the relationship between promotional strategy and market share as well as profitability, future studies should consider the whole performance measures including sales revenue and data collected on multiple informants while also investigation could be on longitudinal survey. Further investigation could also be carried out by engaging the use of a different analytical tool as well as evaluating the actual expenditures on promotional tools and profitability as well as market share.

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## **Adequacy of Pay Structure and Its Impact on Personal Outcomes**

**Siti Salwa Salim<sup>1</sup>, Azman Ismail<sup>2</sup>**

**Abstract:** Pay structure consists of two salient elements: monetary and non-monetary rewards. The ability of administrators to adequately provide these rewards may have a significant impact on personal outcomes. Although this relationship is vital, the role of adequacy of pay structures as an important antecedent was given less emphasis in the organizational pay structure research literature. Thus, this study was undertaken to examine the association between the adequacy of pay structure and personal outcomes. A survey method was conducted to collect data from employees who worked in private institutions of higher learning in Malaysia. The SmartPLS path model analysis demonstrated that job satisfaction and organizational commitment were important outcomes of the adequacy of pay structure in the studied organizations. Furthermore, this study also provided the relevant discussions, implications and conclusion.

**Keywords:** reward; job satisfaction; organizational commitment

**JEL Classification:** E42

### **1. Introduction**

Compensation, also known as salary, wages or reward system can be defined as the combination of cash incentive and fringe benefit that are received by employees from a company (Chee, 2004; Ida & Ali, 2010). In a management perspective, compensation is often viewed as a core human resource management function where human resource managers play important roles in planning and managing the various types of reward systems as an important return for the readiness of employees to perform work or service in organizations (Henderson, 2009; Al-Shaibah & Habtoor, 2015). The ability of administrators to appropriately determine reasonable rewards according to employee contributions is important because it may upgrade employees' affection towards the workplace, reduce turnover

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intention and absenteeism, as well as support organizational growth and development (Nguyen et al., 2014; Rozila, 2013).

The effectiveness of the reward system is important toward organizations and their employees. There are numerous studies that supported the advantages of reward to both the employees and organizations. For example, Rizal et al. (2014) had confirmed that the effectiveness of the reward system were able to boost employees' performance, hence resulted in an improved organizational productivity and development. This finding is consistent with the study done by Gohari et al. (2013) and Mehta (2014) which have found that job-related activities of an employee and how he/she performs them are very important in determining his/her organization's performance.

According to many scholars like Maimunah (2003), Farah Liyana et al. (2014) and Saqib et al. (2015), the main objectives of the reward system are to attract, retain and motivate competitive employees to achieve organizational strategies and goals. In order to achieve these objectives, many employers nowadays are given more attention to improve the design of pay structures for different job structures in their organizations. Many organizations today have designed pay structures based on external competitiveness and internal adjustment variables. External competitiveness is often related to the organization's size, policies, government, laws and regulation, external economic condition, labour market competition, the cultures and customs of environment. (Milkovich et al., 2014; Rozila, 2013). According to Kline & Yu-Chin (2007), organizations that practice external competitiveness tend to provide better rewards to their employees as compared to their competitors. Meanwhile, internal adjustment referred to productivity level, type of job, philosophy of management and corporate strategy. Employers are motivated by these variables to design and manage various types of reward systems (Milkovich & Newman, 2015; Azman et al., 2015).

A current review of the literature pertaining organizational compensation system highlights that effective pay structures have two important payment types: monetary and non-monetary rewards. According to many scholars like Harunnavamwe & Kanengoni (2013), Imran et al. (2014) and Milkovich et al. (2014), monetary reward is also viewed as financial payment, cash payment or direct payment that are normally provided to employees in the forms of salary, bonus and incentive. These financial rewards are important because they may satisfy and fulfill the needs of employees which are growing with today's higher cost of living that forces employees to seek jobs that can provide reasonable income for them to survive (Uddin et al., 2014). Non-financial payment is also called as a benefit program; non-cash payment or indirect payment where they are bestowed to employees based on their statuses as organizational memberships and complementary to monetary rewards (Milkovich et al., 2014; Mochama, 2013). For example, employers normally provide non-financial rewards in forms of

recognition, praise and appreciation, promotion, job enrichment and medical benefits (Mochama, 2013; Imran et al., 2014; Tausif, 2012). These non-financial rewards are important as a complement of financial reward to protect people's health as well as to increase their satisfaction and commitment towards their job (Lameck, 2011; Jayaratna, 2014).

Interestingly, extant studies about organizational pay structure highlighted that the capability of managers to adequately allocate monetary and non-monetary rewards according to employee contributions may have a significant impact on personal outcomes like job satisfaction (Oriarewo et al. 2013; Aktar et al. 2013; Chepkwony and Oloko 2014) and organizational commitment (Azman et al. 2009b; Nawab & Bhatti 2011). In an organizational behavior perspective, job satisfaction is often defined as individuals' feelings towards their job whether satisfied or unsatisfied, and this condition may influence their reactions towards the jobs given (Azman et al., 2013; Nawab & Bhatti 2011; Rafiq et al., 2012). A study by Oshagbemi (2000) confirmed that less satisfied works tend to resign while the more satisfied ones tend to remain in their job. Meanwhile, organizational commitment is defined as the strength of individuals' relationship and their participation in particular organizations (Mowdays et al., 1979; Ida Irdawaty & Ali, 2010). It involves an active relationship with the organization such as the willingness of an individual to contribute in order to increase organizational well-being. Many scholars such as Hemdi & Nasuridin (2006), Walsh and Taylor (2007) and Lee et al. (2012) have found that organizational commitment may reduce costly behaviour such as absenteeism and turnover intention.

Within an organizational reward system model, many scholars have stated that adequacy of pay structure, job satisfaction and organizational commitment are different but highly interrelated concepts. For example, the ability of managers to adequately contribute monetary and non-monetary rewards based on employee contributions may lead to enhanced job satisfaction (Oriarewo et al. 2013; Aktar et al. 2013; Chepkwony and Oloko 2014) and organizational commitment (Azman et al. 2009b; Nawab & Bhatti, 2011). Even though the nature of this relationship is interesting, the role of adequacy of pay structure as an important determinant variable has been given less attention in the organizational reward system's research literature (Oriarewo et al., 2013; Aktar et al., 2013; Chepkwony & Oloko, 2014; Azman et al., 2009b; Nawab & Bhatti, 2011). Many scholars have argued that this situation may be due to previous studies that have over-discussed on the internal features of pay structure, employed a simple correlation method to describe employees' reactions towards the type of pay structure but ignored to measure the effect of adequacy of pay structure on employee outcomes in the workplace of the pay structure model. As a result, these studies have not provided adequate findings to be used as guidelines by practitioners in understanding the complexity of the pay structure and designing suitable strategic plans to enhance the effectiveness of the



pay structure in the organizations. Thus it motivates the researchers to further explore the nature of this relationship.

## **2. Purpose of the Study**

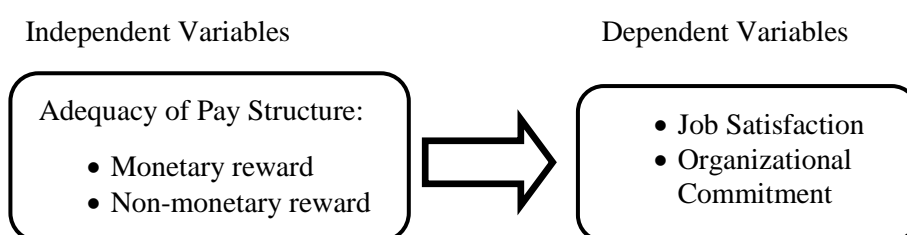
This study has four important objectives: firstly to examine the relationship between adequacy of monetary reward and job satisfaction. Secondly, to examine the relationship between adequacy of non-monetary reward and job satisfaction. Thirdly, to examine the relationship between adequacy of monetary reward and organizational commitment. Fourthly, to examine the relationship between adequacy of non-monetary reward and organizational commitment.

## **3. Literature Review**

Several recent studies were conducted using a direct effect model to examine adequacy of pay structure based on different samples, such as the perceptions of 583 employees of Malaysian public institutions of higher learning (Azman et al. 2009b), 224 employees of educational sector in Pakistan (Nawab and Bhatti 2011), 237 employees of bank in Nigeria (Oriarewo et al. 2013), 70 employees of insurance companies and 84 employees of pharmaceutical companies in Bangladesh (Aktar et al. 2013), and 237 employees of Teachers Service Commission in Kenya (Chepkwony & Oloko, 2014). The findings from these surveys showed that the ability of managers to adequately allocate the type, level and/or amount of monetary and non-monetary rewards according to employee contributions had motivated them to enhance their job satisfaction (Oriarewo et al. 2013; Aktar et al. 2013; Chepkwony and Oloko 2014) and organizational commitment (Azman et al., 2009b; Nawab&Bhatti, 2011) in their respective organizations.

The compensation research literature is consistent with the notion of organizational behavior theory. For example, Adam's (1963, 1965) equity theory which focuses on two important elements; input and outcomes. According to this theory, individual behavior may be affected by the perceptions of being treated fairly in exchanging and distributing resources. For example, when employees perceive the type, level, and/or amount of pay that they receive are equitable with their contributions, it may enhance their satisfaction (Azman et al., 2008). Conversely, when employees perceive the interaction between output and input ratio is not equitable, it may cause inequity which may create conflict situations such as dissatisfaction, the intention to quit, lower productivity and/or reduce the quality of their job (Hofmans, 2012). Besides that, Vroom's (1964) expectancy theory proposes that individuals will decide to behave or act in certain ways because they

are motivated to select a specific behavior due to what they expect the result of that selected behavior. In the context of compensation system, employees will fully commit to perform a given task because they expect that a high reward will be given if they increase their contribution towards the organization. The application of this theory in a compensation model shows that the level of adequacy of pay structure may act as a determinant to job satisfaction (Oriarewo et al. 2013; Aktar et al. 2013; Chepkwony and Oloko 2014) and organizational commitment (Azman et al., 2009; Nawab& Bhatti, 2011). The literature has been used as a foundation to develop a conceptual framework for this study as illustrated in Figure 1.



**Figure 1. Conceptual Framework**

Based on the framework, it can be hypothesized that:

H<sub>1</sub>: Monetary reward is positively related to job satisfaction

H<sub>2</sub>: Non-monetary reward is positively related to job satisfaction

H<sub>3</sub>: Monetary reward is positively related to organizational commitment

H<sub>4</sub>: Non-monetary reward is positively related to organizational commitment

#### **4. Research Design**

This study employed a cross-sectional research design which allowed the researchers to integrate the pay structure literature and the real survey as a main procedure to collect data. The use of these procedures may help the researchers to gather accurate data, decrease bias and increase the quality of the data being collected (Sekaran & Bougie, 2013; Azman et al., 2014; Aimi, 2014). This study was conducted in private institutions of higher learning in Malaysia. In order to avoid intrusiveness, the name of this organization was kept anonymous. At the initial stage of this study, the researchers had drafted the survey questionnaires based on the related past literature. After that, a pilot study was conducted by discussing the questionnaire with 20 administration and academic employees in the organizations. These employees were selected using the purposive sampling technique because the respondents had working experiences from 10 to 20 years

and showed good knowledge and experience about the management of compensation programs in their organizations. The information gathered from this pilot study helped the researchers to improve the content and format of the survey questionnaires for the actual study. A back translation technique was used to translate the survey questionnaires into English and Malay languages in order to increase the validity and reliability of the research findings (Cresswell, 1998; Sekaran & Bougie, 2013)

#### **4.1. Measures**

The survey questionnaires used in this study had three parts. Firstly, the adequacy of monetary reward had 4 items and the adequacy of non-monetary reward had 3 items that were adapted from the compensation management literature (Chepkwony & Oloko, 2014; Farah Liyana et al., 2014; Azman et al., 2009a). The dimensions used to measure the adequacy of monetary reward were the starting point; increment of yearly salary, bonus and the level of wage. Meanwhile, the dimensions used to measure the adequacy of non-monetary reward were health benefit, time to pay back loan and types of loans. Secondly, job satisfaction had 4 items that were adapted from the job satisfaction literature (Azman et al., 2014, 2008; Oriarewo et al., 2013; Warr et al., 1979). The dimensions used to measure job satisfaction were satisfaction with work condition, freedom to choose method of working, the responsibility that was given and attention towards suggestion that was given to the organization. Lastly, organizational commitment had 3 items that were modified from an organizational commitment scale developed by Mowday et al. (1979). The dimensions used to measure organizational commitment were willingness to contribute a greater effort beyond normally, suggestion to friends that the organization is great organization to work for, loyalty towards the organization and feeling inspired by the organization to perform jobs. All items used in the questionnaire were measured using a 7-item scale ranging from “very strongly disagree/dissatisfied” (1) to “very strongly agree/satisfied” (7). Demographic variables (i.e., gender, age, race, status, length of service, salary and position) were used as the controlling variables because this study only emphasized on employee attitudes.

#### **4.2. Sample**

A convenient sampling technique was used to distribute 2000 survey questionnaires to employees who worked in the studied organizations. This sampling technique was chosen because the list of registered employees was not given to the researchers for confidential reasons and this condition did not allow the researchers to randomly select participants in any organization. From the number of questionnaires, 100 usable questionnaires were returned to the researches, yielding 5% of the response rate. The figure exceeded the minimum sample of 30 participants as required by the probability sampling technique,

showing that it may be analyzed using inferential statistics (Sekaran & Bougie, 2013). Participants answered the survey questionnaires voluntarily and with their consents.

### 4.3. Data Analysis

The SmartPLS version 3.0 was employed to assess the validity and reliability of the survey questionnaires data and further test the research hypotheses. The main advantages of using this method were it may deliver latent variable scores, avoid small sample size problems, estimate complex models with many latent and manifest variables and error terms, and handle both reflective and formative measurement models (Henseler et al. 2009). The path coefficients for measuring a structural model used the standardized beta ( $\beta$ ) and t statistics ( $t > 1.96$ ). The value of  $R^2$  was used as an indicator of the overall predictive strength of the model. The value of  $R^2$  was considered as follows: 0.19 (weak), 0.33 (moderate) and 0.67 (substantial) (Chin, 1998; Henseler et al., 2009; Rozila, 2013).

## 5. Results

### 5.1. Respondent's Characteristics

In terms of the respondents' characteristics, the majority of respondents were females (43%), aged between 26 to 30 years old (39%), diploma holders (44%), lecturers (51%), working in academic divisions (75%), had working experiences 5 years and below (76%) and a monthly salary between RM1001 to RM2001 (46%).

**Table 1 Profile of Respondent**

Sample Profile	Sub Profile	Frequency	Percentage (%)
<b>Gender</b>	Male	43	43
	Female	57	57
<b>Age</b>	Less than 25 years	14	14
	26 - 30 years	39	39
	31 - 35 years	16	16
	36 - 40 years	16	16
	41-45 years	1	1
	More than 46 years	14	14

	LCE/SRP	1	1	
	MCE/SPM	14	14	
	HSC/STPM	3	3	
<b>Education</b>	Diploma	44	44	
	Bachelor	27	27	
	Master	9	9	
	Ph. D	2	2	
	Professional & Management Group	34	34	
<b>Position</b>	Supporting Group	15	15	
	Lecturer	51	51	
<b>Division/Department</b>	Academic Division	75	75	
	Non-academic Division	25	25	
<b>Length of Service</b>	Less than 2 years	38	38	
	3-5 years	38	38	
	6-8 years	16	16	
	9-11 years	6	6	
	12-14 years	1	1	
	More than 15 years	1	1	
<b>Salary</b>	Less than RM 1,000			
	RM 1,001–RM 2,000	32	32	
	RM 2,001 - RM 3,000	46	46	
	RM 3,001- RM 4,000	16	16	
	RM 4,000 - RM 5,001	4	4	
	RM 5,001- RM 6,000	1	1	
	RM 6,000 - More than RM 6,001	1	1	

**Note**

**STPM/HSC: Sijil Tinggi Pelajaran Malaysia/Higher School Certificate**

**SPM/MCE: Sijil Pelajaran Malaysia/Malaysia Certificate of Education**

**SRP/LCE: Sijil Rendah Pelajaran/Lower Certificate Education**

Table 2 showed the results for validity and reliability of the construct. Items for each construct had reached the standards of validity and reliability analyses because they had values that exceeded 0.70 (Fornell & Larcker, 1981; Gefen & Straub, 2005). Besides that, each construct had composite values that exceeded 0.80, indicating that the measurement scales had a high internal consistency (Chua, 2006; Henseler et al., 2009).

**Table 2. The results of factor loadings and cross loadings for different constructs**

Constructs	No. of Items	Cross Loading	Composite Reliability
Monetary	4	0.722-0.781	0.834
Non-monetary	3	0.735-0.897	0.840
Job Satisfaction	4	0.722-0.854	0.875
Organizational Commitment	3	0.810-0.874	0.871

Table 3 showed the results for a discriminant validity analysis. The construct for this study had reached the standard of discriminant validity analysis since the values of Heterotrait-monotrait (HTMT) for each construct were less than 0.85 (Clark & Watson 1995; Kline, 2011; Henseler et al., 2009).

**Table 3. Result for Discriminant Validity**

Variables	Monetary	Non-monetary	Job Satisfaction
Non-monetary	0.526		
Job Satisfaction	0.546	0.484	
Organizational Commitment	0.590	0.455	0.639

Table 4 showed the results for a convergent validity analysis. The values of Heterotrait-monotrait (HTMT) for each construct were less than 0.85 (Clark and Wilson 1995; Kline 2011; Henseler et al. 2009), indicating that the constructs had met the standard of convergent validity standard (Hin, 2010; Fornell & Larcker, 1981; Barclay et al., 1995; Henseler et al., 2009).

**Table 4 Results for Convergent Validity**

Variables	Monetary	Non-monetary	Job Satisfaction
Non-monetary	0.776		
Job Satisfaction	0.744	0.671	
Organizational Commitment	0.773	0.648	0.850

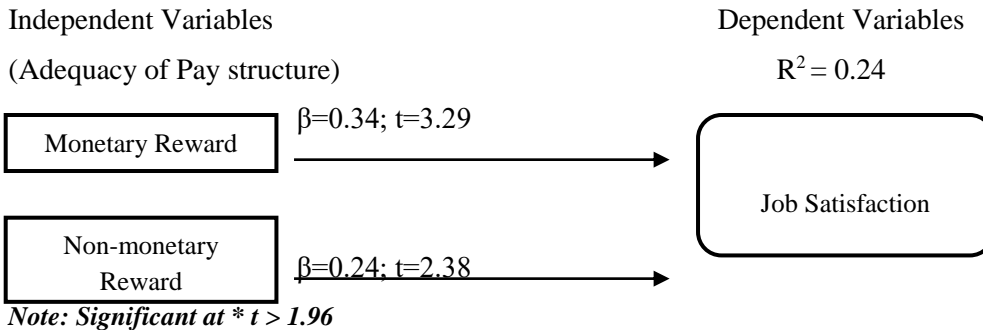
Table 5 showed the results of a construct analysis. The means for all variables were from 4.0 and 4.6, showing that the levels of monetary, non-monetary, job satisfaction and organizational commitment were high. Meanwhile, the values of variance inflation factor (VIF) between the independent variables (monetary and non-monetary) and the dependent variables (job satisfaction and organizational commitment) were less than 5.0, indicating that they were not affected by serious collinearity problems (Hair, 2014; Azman et al., 2014). Therefore, this statistical result confirmed that the constructs had met the acceptable standards of validity and reliability analysis.

**Table 5. Pearson correlation analysis and descriptive statistics**

Variable	Min	Standard Deviation	Variance Inflation factor (VIF)			
			1	2	3	4
1. Monetary	4.0	1.3			1.158	1.158
2. Non-monetary	4.1	1.2			1.158	1.158
3. Job Satisfaction	4.6	.95				
4. Organizational Commitment	4.3	.78				

## 5.2. Outcomes of Testing Hypotheses 1 and 2

Figure 2 showed the quality of model predictions in the analysis and was demonstrated by the score of  $R^2$ . The inclusion of the independent variables (i.e., monetary and non-monetary reward) in the analysis explained 24 percent of the variance in job satisfaction. The results of SmartPLS path analysis revealed two important findings: first, monetary reward was positively and significantly correlated with job satisfaction ( $\beta=0.34$ ;  $t=3.29$ ), therefore  $H_1$  was supported. Second, non-monetary reward was positively and significantly correlated with job satisfaction ( $\beta=0.24$ ;  $t=2.38$ ), therefore  $H_2$  was supported. In sum, these results confirmed that the adequacy of pay structure is an important determinant for job satisfaction.

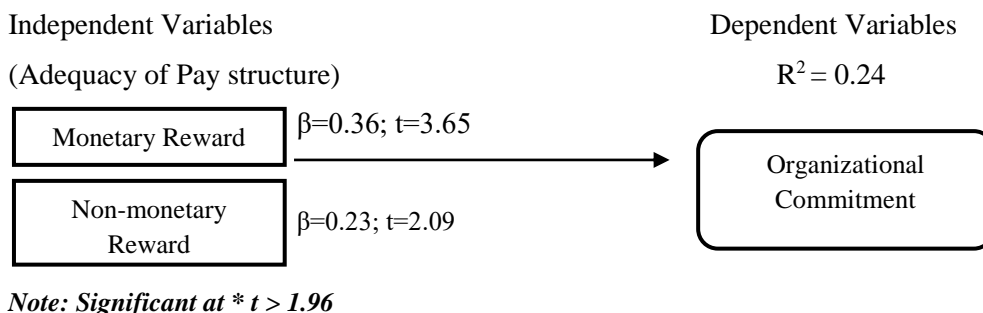


**Figure 2. The outcomes of SmartPLS path model showing the relationship between adequacy of pay structure and job satisfaction**

From the results of the hypothesis testings, a test of predictive relevance as suggested by Stone-Geisser’s test was carried out based on the formula:  $q^2 = Q^2_{included} - Q^2_{excluded} / 1 - Q^2_{included} = 0.130$ . The results showed that the value of  $Q^2$  was greater than zero for the reflective endogenous latent variables (i.e., job satisfaction), indicating that this model had met a predictive relevance (Hair et al. 2014).

**5.3. Outcomes of Testing Hypotheses 3 and 4**

Figure 3 presented the quality of model in the analysis and was demonstrated by the score of  $R^2$ . It can be seen that the independent variables (i.e., monetary reward and non-monetary reward) had explained 21 percent of the variance in organizational commitment. The results of the SmartPLS path analysis revealed two important findings. First, monetary reward was positively and significantly correlated with organizational commitment ( $\beta=0.36; t=3.65$ ), therefore  $H_3$  was supported. Second, non-monetary was positively and significantly correlated with organizational commitment ( $\beta=0.23; t=2.09$ ), therefore  $H_4$  was supported. In sum, this results confirmed that the adequacy of pay structure is an important determinant of organizational commitment.



**Figure 3. The outcomes of SmartPLS path model showing the relationship between adequacy of pay structure and organizational commitment**



From the results of the hypothesis testing, a test of predictive relevance as suggested by Stone-Geisser's test was carried out based on the formula:  $q^2 = \frac{Q^2_{included} - Q^2_{excluded}}{1 - Q^2_{included}} = 0.147$ . The results showed that the value of  $Q^2$  was greater than zero for the reflective endogenous latent variables (i.e., organizational commitment), indicating that this model had met a predictive relevance (Hair et al. 2014).

## 6. Discussions and Implications

This study confirmed that the adequacy of pay structure didact as an important determinant of job satisfaction and organizational commitment in the studied organizations. In the context of this study, HR officers and/or managers often used broad compensation policies and rules to achieve their stakeholders' needs and expectations. The majority of the respondents perceived that the levels of monetary reward, nonmonetary reward, job satisfaction and organizational commitment were high. This situation described that the ability of managers to provide adequate monetary and non-monetary rewards may lead to greater job satisfaction and organizational commitment in the studied organizations.

This study had provided three implications; theoretical contribution, robustness of research methodology, and practical contribution. In terms of theoretical contribution, the findings of this study showed that the ability of managers to adequately allocate monetary and non-monetary rewards had been an important determinant of job satisfaction and organizational commitment. These results had also supported and extended the studies by Azman et al.(2009b), Nawab and Bhati (2011), Aktar et al. (2013), Oriarewo et al. (2013), Chepkwony and Oloko (2014).Although the research findings were significant, the effective sizes of the adequacy of pay structure on employee outcomes were low. A thorough review of the in-depth interview outcomes showed that the results may be affected by external factors which were the respondent's characteristic had different profiles or backgrounds and different management skills in order to structure pay for employees in the studied organizations. With respect to the robustness of the research methodology, the survey questionnaires used in this study had satisfactorily met the requirements of the validity and reliability analyses. This situation could lead to producing accurate and reliable research findings.

In terms of practical contributions, the findings of this study may be used as important recommendations by managements to improve the administration of pay structure systems in organizations. In order to achieve this objective, the improvements should cover some important aspects. Firstly, managers should review and distribute the type, level and/or amount of pay structure adequately, according to the current national standards of living. This is important because it might protect the employees' welfares, increase their purchasing power, and

decrease their burden in fulfilling family and personal needs. Second, managers should be exposed with the latest knowledge about pay systems and procedures because it may lead to designing and upgrading the pay system and will fulfill the employees' needs. Third, additional pay should be rewarded to high performers because it can attract, retain and motivate employees in order to achieve their organizations' goals and strategies. If organizations seriously consider and positively adapt these suggestions, this may strongly motivate employees to support organizational goals and strategies.

## **7. Conclusions**

This study had tested a conceptual framework that was developed based on the pay structure research literature. The instrument used in this study had met the acceptable requirements of validity and reliability analyses. The outcomes of the SmartPLS path model analysis confirmed that adequacy of pay structure (i.e., monetary reward and non-monetary reward) was significantly correlated with job satisfaction and organizational commitment, therefore H1, H2, H3 and H4 were fully accepted. The results had also supported and broadened the pay structure literature that were mostly published overseas. This study had further suggested that the ability of managers to provide adequate monetary and non-monetary rewards based on employee contributions will strongly induce positive subsequent attitudinal and behavioral outcomes (e.g., performance, commitment, and justice). As a result, these positive outcomes may lead to maintained and supported organizational strategies and goals in the era of global economic turbulent.

This study had acknowledged several limitations. First, a cross-sectional research design was used to gather data at one point of time within the period of the study. Secondly, this study only examined the direct relationship between the independent and dependent variables without testing the effects of the moderating or mediating variables. Thirdly, other pay structure outcomes (e.g., commitment, trust and performance) that were significant for organizations and employees were not discussed in this study. Finally, the sample for this study was non-randomly and on one organization sector only. For future research, the mediating or moderating variables can be used to test this model in order to strengthen the results. Besides that, other personal outcomes (e.g., performance, motivation and loyalty) can also be tested as dependent variables to examine the influence of adequacy of pay structure on personal behavior. Finally, for future research, other sectors such as the public sector can be chosen as an area of the study to be compared on whether the adequacy of pay structure may influence employees' outcomes in the public sector.

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## The Current Approaches of Land Evaluation

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**Abstract:** Land evaluation is a topical issue, especially now when people speak increasingly more about population growth and its need for new living spaces. In this sense the land evaluation methodology direct comparison and extraction method, always remain timeless. The two methods were aimed for more accurate determination of assessed land value. Following application of the two methods, respecting International Valuation Standards, recommendations and work methodology recommended by ANEVAR, it was concluded that the best method of valuing land in question is the direct comparison method.

**Keywords:** direct comparison method; method of extraction; evaluation; market value; price

**JEL Classification:** G32; G33; C39

### 1. Introduction

Market value is estimated by analyzing the market to find similar properties and then comparing these with the properties under evaluation. The major premise of this method is that the market value of a property can be directly related to some competitive and comparable property prices. Comparative analysis focuses on the similarities and differences between properties and transactions that influence value. As a limitation of this method, it rarely applies to special purpose properties because the market also sold fewer properties. However, this limitation is not applicable in the sphere of action of mortgage and / or real estate market where properties are traded to be residential.

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The market value is the most representative concept regarding the evaluation of enterprises and assets. It is also the best known and used standard valuation practice, having a basic role in assessing economic resources on the market.

The market value concept also refers to the fact that when the transaction parties are aware of the characteristics of the property and market conditions on the valuation date. So for establishing market value, representing the most likely price that can be obtained, are taken into account the following elements:

- The concrete existence of the sale at a certain date;
- The existence of an open and competitive market for property assessment;
- Agreement of Parties to participate in the transaction;
- Informing parties in advance about all aspects of the transaction in order to act in their interest;
- The lack of a relationship between the parties or interests is likely to influence the price;
- The existence of appropriate conditions for marketing;

The purpose of the assessment report is the real property - land, located in the city of Galati, Galati County. The aim of the report is to establish the market value of the land plot, in view of the real estate market trading.

## **2. The Method of Direct Comparison on Assessed Land Value. Development**

According to the International Valuation Standards and recommendations accepted by ANEVAR methodological work, properties evaluation can be addressed by direct comparison by which the subject property is compared with similar properties that have sold recently or who know about sale prices or deals price, using data on comparable properties, and comparisons are made to demonstrate the price that would probably sell the property at the price the market would offer.

The base elements of comparison that the direct comparison method proposes regarding land evaluation are:

- Ownership;
- Terms of funding;
- Terms of sale;
- Market Conditions;
- Location;
- Appearance;
- Economic characteristics;
- Use;
- Non-real estate component.

Although these comparison elements cover much of practical situations, direct comparison method can't be limited to them. When setting the price for the sale of land they have an important influence, can take into account the following elements:

- Topography;
- The view;
- Traffic in the area;
- Quality neighbors;
- Access;
- Air pollution.

Assessment procedure:

- market research looking for similar transactions with the real estate assessment;
- check transactions to determine whether they were true and accurate;
- choice of relevant comparative criteria and then applying them to establish the real selling price of the analyzed subject property;
- evaluation analysis resulting in strengthening the market value of the property being valued.

Elements of comparison are features both of the property assessed but also of the comparable, and after applying the evaluation process they will determine the market value of the property.

**Table 1. The method of the direct comparison of the land assessed**

Feature comparison	Assessed property	Comparable 1	Comparable 2	Comparable 3
Sale price		€ 195,000	€ 60,000	€ 253,450
		390.00	150.00	185.00
Transaction / offer		Offer	Offer	Offer
Corrected		312	135	167
1. Right over property	Integral	Integral	Integral	Integral
Corrected		312	135	167
2. Financial conditions		At the market	At the market	At the market
Corrected		312	135	167
3. Conditions of sale		Exchange / Sale	Real Estate Market	Real Estate Market
Corrected		€ 281	€ 135	€ 167
4. Market conditions	Feb -14	Feb -14	Feb -14	Feb -14
Corrected		€ 280.80	€ 135.00	€ 166.50



5.Location	Central	Downtown	Similar	Similar
Correction		€ 252.72	€ 135.00	€ 166.50
6. Physical features				
6.1. Land Surface	686.00	500.00	400.00	1,370.00
Correction for the area - sqm		€ 253	€ 135	€ 166
6.2.Construction on land	Not	Not	Yes	Yes
Correction Construction		0	9000	12000
6.3.Open	14	-	12.00	23.00
Correction for opening		€ 252.72	€ 112.50	€ 154.97
6.4. Utilities	All	Identical	Identical	Identical
Correction for utilities		253	113	155
7. Economic features		Identically	Identically	Identically
Correction to the economic characteristics		253	113	155
8. Use (HABU)	Residential	Residential	Residential	Residential
Correction to use		€ 253	€ 113	€ 155
9. Non-real estate components	Not applicable	Not applicable	Not applicable	Not applicable
Corrected Price		€ 253	€ 113 €	€ 155
Total net Correction		€ 137	€ 38	€ 30
Total net correction (% of sale price)		35%	25%	16%
Total gross Correction		€ 137.28	€ 37.50	€ 30.03
Total gross correction (% of sale price)		35%	25%	16%
Number adjustments		3	2	3

€ 106,307.47	477,841.45	
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Euro exchange rate= 4, 4949 RON

155 EU / sqm

The value of land owned by the company, in the evaluator's opinion, on 20 March 2014, estimated by direct comparison approach method:

$V_{\text{Land (M. comparison)}} = 477,841.45$  lei, equivalent to 106 300 euro

Explaining corrections:

- Apply a correction of 10% for offers, representing average margin;
- Comparable 1 was corrected by 10% for the offered price - exchange broker, to sell, following a further negotiations;
- Comparable 1 was corrected by 10% in the downtown location;

- Comparable 3 was corrected with 800 euro, respectively localization cost of land - an additional benefit; represents the sale of two plots of land, 800 euros are needed for the work of cadaster and notary;
- 2nd and 3rd comparable were corrected with 9000, respectively 12,000 euro - demolition construction value placed on them- about 50 euro/sqm.

### 3. Valuation of Land Extraction Technique

In the case of evaluation by indirect comparison method - extraction technique, the land value is determined by the difference between the selling price of comparable properties and the total arrangement value estimated by third parties and building replacement cost net.

Extraction method is recommended to be used in the following situations: when the property includes newer construction; when on the real estate market are not enough offers free land but in exchange there are many information about the properties built. According to the "cost of reconstruction - RESIDENTIAL BUILDINGS replacement cost" replacement cost for villa P + M and uninhabitable basement, concrete floor, roof framing, roofing sheets Lindab, brick masonry, all facilities - gas central heating natural is 526 euro / mpSdc (value including VAT), which developed area for this type of house is 480 square meters (POT = 35% recommended under construction P + M). Therefore, the net replacement cost of the building is 252,500 euro.

From the information obtained by value, trading value of the buildings designated for Individual Home by property developers stands in the value range of 750 euro / sqm - 800 euro / sqm Su. Considering the central position of the building is estimated trading value of EUR 360,000 Residential Housing. Decreasing gross replacement cost of the building - 252 490 euro, result: land value, property of the company, in the evaluator's opinion, on 20 March 2014, estimated the extraction technique:  $V_{\text{Land (M. Extraction)}} = 107.500 \text{ Euro}$ , equivalent to 483,201.75 RON.

**Table 2. Extraction method of land assessed**

No. Item	Property valued	Specifications	Euro
1.	Surface built	480 sqm	
2.	Replacement cost net	526/sqm	€ 252.500
3.	Market value		€360.000
4.	Residual value of the land		€107.500

### 4. Reconciliation values, assessor's opinion

For the reconciliation it was proceeded to review the entire results of assessments in order to have the certainty that the available data, analytical techniques, reasoning and logic applied, leading to consistent judgments. The results obtained.

4.1. The property value located within the city of Galati, Galati County, the valuation date is estimated by the direct comparison approach, the sum of: V field (M. comparison) = 477.841,45ron, equivalent to 106 300 euro

4.2. The property value located within the city of Galati, Galati County, the valuation date is estimated through the extraction technique: V field (M. extraction) = 107,500 euros, equivalent to 483,201.75 Ron.

For real estate properties of this type and destination, the most appropriate approach for determining the market value is direct sales comparison method/offers, considering the amount of information that formed the basis of applying the methods, and the low demand for similar properties.

## **5. Arguments Relevant in Determining the Final Value**

The arguments that led to the drafting considerations of this opinion and values are:

- The proposed value takes into account both economic elements provided by the customer and market data obtained from the specialized market evaluator;
- the goods were valued in the existing configuration on the date of inspection, considering the proper technical condition at this time;
- the amount proposed takes account only of the assumptions and assessments expressed in the this particular report;
- the amount is a prediction;
- the value is subjective;
- the evaluation is an opinion on a value;
- the amount does not include VAT.

## **6. Conclusion**

The evaluation process that included all research, data, reasoning and analyzes needed to reach the estimated value, ended. Following this result 477,841.45 lei is the value determined by direct comparison method, as the market value of the land assessed, taking into account the current context of the real estate market, an attractive location in the real estate market and the risk of recovery. The method of direct comparison has proven to be the best use for land valuation because it is the most common method of evaluation when there enough firm offers market transactions or, as in this case.

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**Financial Institutions and Services****Volatility of Stock Markets  
(an Analysis of South Asian and G8 Countries)****Muhammad Mansoor Baig<sup>1</sup>, Waheed Aslam<sup>2</sup>, Qaiser Malik<sup>3</sup>, Muhammad Bilal<sup>4</sup>**

**Abstract:** The objective of this study is to make an analysis of volatility of stock markets between South Asian Stock Markets and Stock Markets of Group of Eight Countries. This study important for the investors whose want to invest in stock markets. This study helps investors to determine what stock market is more volatile. To make the analysis three South Asian stock markets and Group of Eight countries stock markets are selected. South Asian stock markets indexes include KSE 100 (Pakistan), SENSEX (India), ASPI (Sri Lanka), CAC 40 (France), DAX (Germany), S & P / TSX Composite (Canada), FTSE MIB (Italy), RTS (Russia), Nikkei 225 (Japan), S & P 500 (USA) and FTSE 100 (UK). Data is collected from the period of January 1<sup>st</sup> 2005 to August 31<sup>st</sup> 2015. ARCH and GARCH model is used to analyze the volatility of South Asian Stock Markets and stock markets of Group of Eight Countries. The findings show that South Asian Stock Markets are less volatile while Stock Markets of Group of Eight Countries are high volatile. This study is useful for investment institutions and portfolio managers because it focuses on current issues and takes the current data.

**Keywords:** ARCH; GARCH; Heteroscedasticity

**JEL Classification:** G10; G20

**1. Introduction**

A well-established stock market leads to a strong economy. Stock market is a volatile market. There are many factors affected directly or indirectly by stock market volatility. The most important factors include interest rate, exchange rate etc. When government has changed the monetary policy it leads to change the interest rate which is effects the stock market return. When the interest rates

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increases, cost of borrowing also increases. It directly affects both individual and business. When the interest rate is increases people give preference to invest in saving accounts rather than investing in stock market because stock market is highly risky. On the other hand, high interest rates are also directly affect the business. The cost of borrowing goes up and the business unable to invest more funds which directly affect the business profitability. If the profit decline it also leads to decline the stock prices of the company. Declining in stock prices is not a good sign for stock markets because investors are not attractive to invest in stock markets. When the central bank increases the interest rates, newly extended government securities such as T-Bills and Bonds become more popular among the investors (Corsetti, Meier, & Müller, 2009).

Stock market is a source to facilitate the investors and borrowers. It provides a platform for reallocation of funds in different sectors of the economy. It also helpful for borrowers to take loans on low interest rates as compared to market rates. Now the world has changed into a global village. Countries are trying to cut the barriers in the way of globalization to attain high profit and increase the wealth of shareholders. The objective of globalization is to increase the profitability and decrease the unsystematic risk. World Trade Organization (WTO) takes many steps to promote globalization of financial markets. Globalization helps the investors to diversify their investment and minimize the risk. Stock markets helps to promote globalization.

The main objective of this study is to explore the presence of volatility in stock markets of various countries such as Pakistan, India, Sri Lanka, France, Germany, Russia, Italy, Japan, United Kingdom, Canada and USA. This investigation focus on whole stock markets instead of a few sectors or companies. In this study ARCH and GARCH techniques are used to investigate the volatility of stock markets. This research helps the investors to know that which stock markets are more volatile and which are less and this research also helpful for the investors to know the relationship between South Asian countries and Group of Eight countries.

## **2. Literature Review**

Subhani et al (2011) investigated a study on volatility in stock return relating to interest rate and exchange rate. The data of variables interest rate and exchange rate of eight countries was collected by using yahoo finance and Federal Reserve Economic Data. The data was analyzed by applying techniques of ARCH and GARCH. The results show that volatility exists in stock markets relating to interest rate and exchange rate. Moreover, this study assists the investors and decision maker to measuring the value of interest rate and exchange rate of stock markets because directly or indirectly stock market is influenced by interest and exchange rates.

Attari et al (2013) conducted a study on the relationship between macroeconomic volatility and stock markets volatility. The data of variables inflation, gross domestic product and interest rate Pakistan was collected for the period of 1991-2012. The data was analyzed by applying Arch and Augmented dicky fuller test at different level. The result indicates that there is relationship exists between stock markets prices and macroeconomic factors (inflation, gross domestic product and interest rate). Furthermore, Pakistan KSE 100 stock market is more volatile and riskier market, giving more return to investors.

Babar zaheer But (2010) examined a study on economic forces and stock market returns. The data was collected from 79 firms related to 09 different industries KSE 100. The data was analyzed by using descriptive statistic, Augmented dicky fuller test Philips perron, regression and Garch. The result indicates that stock market volatility should be varying with passage of time and showing the significant relationship between risk and return. This study suggests the investors to diversify the risk in different markets.

Vuong Thanh Long () conducted a study on the empirical analysis of stock return volatility with regime change on Vietnam. The data was collected from the stock market of Vietnam (VSM). The data was analyzed by applying Arch, Garch and Augmented dicky fuller test at different level. The result shows that that financial liberalization has a negative influence on the volatility of stock return in VSM.

Diebold and Yilmaz (2008) investigated a study on macroeconomic volatility and Stock Market Volatility. The data was collected from broad international cross section of stock markets of forty countries and website of World Bank. The data was analyzed by applying Arch and garch. The result indicates that there exists a clear relationship between macroeconomic variables and stock market volatility.

Nazir et al (2010) conducted a study on the determinant of stock market volatility in Karachi stock market. The data was collected from stock exchange of Pakistan kse 100 and annual reports of company's balance sheet for the period 2003-2008. The data was analyzed by using payout ratio, earning volatility and leverage. The results show that dividend policy has a strong significant relationship with the stock price volatility in KSE.

Kalu o and okwuchukwu (2014) conducted a study on of stock market volatility in Nigeria market. The data was collected from stock exchange of Nigeria STOCK market NSE for the period 2000 to 2013 taking monthly values. The data was analyzed by using descriptive statistic, Augmented dicky fuller test Philips perron and garch-x model. The results show that NSE return volatility is positively affected US dollar and negative broad money changes.

OSANI and NWOSA (2011) conducted a study on of stock market volatility and macroeconomic variables in Nigeria market. The data was collected from stock



exchange of Nigeria STOCK market NSE for the period 1996- to 2010. The data was analyzed by using techniques of E-GARCH AND LA-VAR. The results show that a bi-causal relationship exists between stock market volatility and real GDP volatility; and there is no causal relationship between stock market volatility and the volatility in interest rate and inflation rate.

Farid and Ashraf (1995) conducted a study on volatility of KARACHI stock market. The data was collected from stock exchange of Pakistan kse 100. The data was analyzed by using model of Geometric Brownian Motion. The results show that fall and rising of prices has a significant relationship with the stock price volatility in KSE. Their study was helpful for the investors in case of decision making.

Qayyum and Kemal (2006) conducted a study on volatility different stock market with foreign markets. The data was collected from Karachi stock exchange and Karachi bank for the period 1998-2006. The data was analyzed by applying technique of E-GARCH and volatility spillover model. The results show that the domestic and foreign stock markets are directly depend upon each other, if one market show fall in prices then it also effects other markets volatility. Further their study concluded that there exists no long run relationship exist these markets.

Hameed and Ashraf (2006) conducted a study on stock market volatility and weak-form efficiency. The data was collected from closing values of the KSE-100 for the period 1998-2006. The data was analyzed by applying technique of descriptive statistic, correlation and GARCH. The results show that the returns exhibit persistence and volatility gathering and also study focus on funds because higher projects are not running without funds. This study suggests the investors to diversify the risk in different markets.

Rani and sheikh (2012) investigated a study on volatility modeling of Karachi stock market. The data was collected from the data was collected from Karachi stock exchange for the period 1998-2008 on daily basis. The data was analyzed by applying technique of ARMA, ARCH, GARCH and EGARCH models. The result indicates that Karachi stock market is more volatile and positive return are linked with higher volatility, while negative return is contrast.

### **3. Hypothesis**

**H1:** The volatility in stock return of current period predicts on the basis of volatility in previous stock return.

**H0:** The volatility in stock return of current period does not predict on the basis of volatility in previous stock return.

#### 4. Methodology

In this study to investigate the volatility of stock markets daily data of south Asian stock markets and stock markets of Group of Eight countries is collected by using the source of Yahoo Finance and Investing.com from the period of January 1<sup>st</sup>, 2005 to June 30<sup>th</sup>, 2015. South Asian countries include Pakistan, India and Sri Lanka while Group of Eight countries include France, Germany, Russia, Canada, United Kingdom, Italy, Japan and USA. Daily data is used to investigate the volatility of stock markets because a lower frequency (monthly, quarterly or annually) does not reveal an ample representation of volatility. The market indices selected for each country are KSE 100 (Pakistan), S&P BSE 100 (India), (Sri Lanka) CAC 40 (France), DAX (Germany), FTSE (United Kingdom), FTSE MIB (Italy), NIKKEI 225 (Japan), RTS (Russia), S & P 500 (United States), S & p TSX Composite Index (Canada).

**Table 1. Sample period and Observations of selected stock markets**

Country	Sample Period	Observations
Pakistan	01-03-2005 to 08-31-2015	2632
India	01-03-2005 to 08-31-2015	2635
Sri Lanka	01-03-2005 to 08-31-2015	2561
France	01-03-2005 to 08-31-2015	2729
Germany	01-03-2005 to 08-31-2015	2722
United Kingdom	01-03-2005 to 08-31-2015	2768
Italy	01-03-2005 to 08-31-2015	2702
Japan	01-03-2005 to 08-31-2015	2632
Russia	01-03-2005 to 08-31-2015	2653
United States	01-03-2005 to 08-31-2015	2684
Canada	01-03-2005 to 08-31-2015	2720

In this study to investigate the volatility of stock markets ARCH and GARCH techniques are used. ARCH and GARCH are used in various studies to measure the stock market volatility. ARCH is one of the best tool of measuring stock market volatility. ARCH and GARCH is was also used by Low, Ibrahim and Huang (2005) in their research. ARCH is applied when both autocorrelation and heteroscedasticity problems exists along with. So, first step is to check autocorrelation and heteroscedasticity.

## 5. Results and Findings

For Pakistan, in table 1.1 the value of Prob. Chi-Square (1) is 0.0000 which shows that both Autocorrelation and Heteroskedasticity exist in Karachi Stock Exchange.

**Table 1.1**

<b>Heteroscedasticity Test: ARCH</b>			
F-statistic	360.0045	Prob. F(1,2628)	0.0000
Obs*R-squared	316.8709	Prob. Chi-Square(1)	0.0000

In table 2.1, the mean equation of ARCH (1) shows that the P value of KSE (-1) is significant which explains that previous day return helps to predict the today's return and the positive value of coefficient of KSE (-1) reveals that today's return 10.43% is higher than the previous day return. In variance equation of ARCH (1), the P value of RESID (-1) <sup>2</sup> 0.0000 is significant which shows that today's volatility can be explained on the basis of past price behavior and the value of coefficient of residual is positive which shows that 45.60% today volatility is high as compare to previous day volatility. In table 2.2 the P-value of GARCH (-1) is significant which represents that today's volatility is affected due to the previous day volatility and the coefficient of GARCH (-1) is positive which represent that 77.38% last day volatility transfer in next day.

For India, in table 1.2 the value of Prob. Chi-Square (1) is 0.0000 which shows that both Autocorrelation and Heteroskedasticity exist in Bombay Stock Exchange.

**Table 1.2**

<b>Heteroscedasticity Test: ARCH</b>			
F-statistic	48.93257	Prob. F(1,2631)	0.0000
Obs*R-squared	48.07564	Prob. Chi-Square(1)	0.0000

In table 2.1, the mean equation of ARCH (1) shows that the P value of SENSEX (-1) is insignificant which explains that today's return is not predicted on the basis of previous day return and the positive value of coefficient of SENSEX (-1) reveals that today's return 2.95% is higher than the previous day return. In variance equation of ARCH (1), the P value of RESID (-1) <sup>2</sup> 0.0000 is significant which shows that today's volatility can be explained on the basis of past price behavior and the value of coefficient of residual is positive which shows that 42.99% today volatility is high as compare to previous day volatility. In table 2.2 the P-value of GARCH (-1) is significant which represents that today's volatility is affected due to the previous day volatility and the coefficient of GARCH (-1) is positive which represent that 89.55% last day volatility transfer in next day.

For Sri Lanka, in table 1.3 the value of Prob. Chi-Square (1) is 0.0000 which shows that both Autocorrelation and Heteroskedasticity exist in Colombo Stock Exchange.

**Table 1.3**

<b>Heteroscedasticity Test: ARCH</b>			
F-statistic	240.4127	Prob. F(1,2557)	0.0000
Obs*R-squared	219.9233	Prob. Chi-Square(1)	0.0000

In table 2.1, the mean equation of ARCH (1) shows that the P value of ASPI (-1) is significant which explains that previous day return helps to predict the today's return and the positive value of coefficient of ASPI (-1) reveals that today's return 25.06% is higher than the previous day return. In variance equation of ARCH (1), the P value of RESID (-1) <sup>2</sup> 0.0000 is significant which shows that today's volatility can be explained on the basis of past price behavior and the value of coefficient of residual is positive which shows that 48.63% today volatility is high as compare to previous day volatility. In table 2.2 the P-value of GARCH (-1) is significant which represents that today's volatility is affected due to the previous day volatility and the coefficient of GARCH (-1) is positive which represent that 76.20% last day volatility transfer in next day.

For France, in table 1.4 the value of Prob. Chi-Square (1) is 0.0000 which shows that both Autocorrelation and Heteroskedasticity exist in Karachi Stock Exchange.

**Table 1.4**

<b>Heteroscedasticity Test</b>			
F-statistic	116.9874	Prob. F(1,2725)	0.0000
Obs*R-squared	112.2541	Prob. Chi-Square(1)	0.0000

In table 2.1, the mean equation of ARCH (1) shows that the P value of CAC40 (-1) is significant which explains that previous day return helps to predict the today's return and the negative value of coefficient of CAC40 (-1) reveals that today's return 4.95% is less than the previous day return. In variance equation of ARCH (1), the P value of RESID (-1) <sup>2</sup> 0.0000 is significant which shows that today's volatility can be explained on the basis of past price behavior and the value of coefficient of residual is positive which shows that 30.91% today volatility is high as compare to previous day volatility. In table 2.2 the P-value of GARCH (-1) is significant which represents that today's volatility is affected due to the previous day volatility and the coefficient of GARCH (-1) is positive which represent that 89.31% last day volatility transfer in next day.

For Germany, in table 1.5 the value of Prob. Chi-Square (1) is 0.0000 which shows that both Autocorrelation and Heteroskedasticity exist in Frankfurt Stock Exchange.

**Table 1.5**

<b>Heteroscedasticity Test: ARCH</b>			
F-statistic	80.75333	Prob. F(1,2718)	0.0000
Obs*R-squared	78.48103	Prob. Chi-Square(1)	0.0000

In table 2.1, the mean equation of ARCH (1) shows that the P value of DAX (-1) is insignificant which explains that today's return is not predicted on the basis of previous day return and the negative value of coefficient of DAX (-1) reveals that today's return 2.61% is less than the previous day return. In variance equation of ARCH (1), the P value of RESID (-1) <sup>2</sup> 0.0000 is significant which shows that today's volatility can be explained on the basis of past price behavior and the value of coefficient of residual is positive which shows that 28.97% today volatility is high as compare to previous day volatility. In table 2.2 the P-value of GARCH (-1) is significant which represents that today's volatility is affected due to the previous day volatility and the coefficient of GARCH (-1) is positive which represent that 89.31% last day volatility transfer in next day.

For Canada, in table 1.6 the value of Prob. Chi-Square (1) is 0.0000 which shows that both Autocorrelation and Heteroscedasticity exist in Toronto Stock Exchange.

**Table 1.6**

<b>Heteroscedasticity Test: ARCH</b>			
F-statistic	353.0899	Prob. F(1,2716)	0.0000
Obs*R-squared	312.6980	Prob. Chi-Square(1)	0.0000

In table 2.1, the mean equation of ARCH (1) shows that the P value of SPTSX (-1) is significant which explains that previous day return helps to predict the today's return and the positive value of coefficient of SPTSX (-1) reveals that today's return 26.32% is higher than the previous day return. In variance equation of ARCH (1), the P value of RESID (-1) <sup>2</sup> 0.0000 is significant which shows that today's volatility can be explained on the basis of past price behavior and the value of coefficient of residual is positive which shows that 47.89% today volatility is high as compare to previous day volatility. In table 2.2 the P-value of GARCH (-1) is significant which represents that today's volatility is affected due to the previous day volatility and the coefficient of GARCH (-1) is positive which represent that 90.65% last day volatility transfer in next day.

For United Kingdom, in table 1.7 the value of Prob. Chi-Square (1) is 0.0000 which shows that both Autocorrelation and Heteroskedasticity exist in London Stock Exchange.

**Table 1.7.**

<b>Heteroscedasticity Test: ARCH</b>			
F-statistic	173.8215	Prob. F(1,2764)	0.0000
Obs*R-squared	163.6554	Prob. Chi-Square(1)	0.0000

In table 2.1, the mean equation of ARCH (1) shows that the P value of FTSE (-1) is significant which explains that previous day return helps to predict the today's return and the negative value of coefficient of FTSE (-1) reveals that today's return 8.43% is less than the previous day return. In variance equation of ARCH (1), the P value of RESID (-1) <sup>2</sup> 0.0000 is significant which shows that today's volatility can be explained on the basis of past price behavior and the value of coefficient of residual is positive which shows that 47.65% today volatility is high as compare to previous day volatility. In table 2.2 the P-value of GARCH (-1) is significant which represents that today's volatility is affected due to the previous day volatility and the coefficient of GARCH (-1) is positive which represent that 87.70% last day volatility transfer in next day.

For Italy, in table 1.8 the value of Prob. Chi-Square (1) is 0.0000 which shows that both Autocorrelation and Heteroskedasticity exist in Borsa Italian.

**Table 1.8**

<b>Heteroscedasticity Test: ARCH</b>			
F-statistic	91.44596	Prob. F(1,2698)	0.0000
Obs*R-squared	88.51367	Prob. Chi-Square(1)	0.0000

In table 2.1, the mean equation of ARCH (1) shows that the P value of FTSE (-1) is significant which explains that previous day return helps to predict the today's return and the negative value of coefficient of FTSE (-1) reveals that today's return 7.33% is less than the previous day return. In variance equation of ARCH (1), the P value of RESID (-1) <sup>2</sup> 0.0000 is significant which shows that today's volatility can be explained on the basis of past price behavior and the value of coefficient of residual is positive which shows that 32.18% today volatility is high as compare to previous day volatility. In table 2.2 the P-value of GARCH (-1) is significant which represents that today's volatility is affected due to the previous day volatility and the coefficient of GARCH (-1) is positive which represent that 91.19% last day volatility transfer in next day.

For Japan, in table 1.9 the value of Prob. Chi-Square (1) is 0.0000 which shows that both Autocorrelation and Heteroscedasticity exist in Tokyo Stock Exchange.

**Table 1.9**

<b>Heteroscedasticity Test: ARCH</b>			
F-statistic	287.9999	Prob. F(1,2628)	0.0000
Obs*R-squared	259.7530	Prob. Chi-Square(1)	0.0000

In table 2.1, the mean equation of ARCH (1) shows that the P value of NIKKEI225 (-1) is significant which explains that previous day return helps to predict the today's return and the negative value of coefficient of NIKKEI225 (-1) reveals that today's return 15.69% is less than the previous day return. In variance equation of ARCH (1), the P value of RESID (-1) <sup>2</sup> 0.0000 is significant which shows that today's volatility can be explained on the basis of past price behavior and the value of coefficient of residual is positive which shows that 35.70% today volatility is high as compare to previous day volatility. In table 2.2 the P-value of GARCH (-1) is significant which represents that today's volatility is affected due to the previous day volatility and the coefficient of GARCH (-1) is positive which represent that 86.44% last day volatility transfer in next day.

For Russia, in table 1.10 the value of Prob. Chi-Square (1) is 0.0000 which shows that both Autocorrelation and Heteroscedasticity exist in Moscow Exchange.

**Table 1.10**

<b>Heteroscedasticity Test: ARCH</b>			
F-statistic	200.1030	Prob. F(1,2649)	0.0000
Obs*R-squared	186.1895	Prob. Chi-Square(1)	0.0000

In table 2.1, the mean equation of ARCH (1) shows that the P value of RTS (-1) is significant which explains that previous day return helps to predict the today's return and the positive value of coefficient of RTS (-1) reveals that today's return 19.14% is higher than the previous day return. In variance equation of ARCH (1), the P value of RESID (-1) <sup>2</sup> 0.0000 is significant which shows that today's volatility can be explained on the basis of past price behavior and the value of coefficient of residual is positive which shows that 36.98% today volatility is high as compare to previous day volatility. In table 2.2 the P-value of GARCH (-1) is significant which represents that today's volatility is affected due to the previous day volatility and the coefficient of GARCH (-1) is positive which represent that 88.44% last day volatility transfer in next day.

For USA, in table 1.11 the value of Prob. Chi-Square (1) is 0.0000 which shows that both Autocorrelation and Heteroscedasticity exist in New York Stock Exchange.

**Table 1.11**

<b>Heteroscedasticity Test: ARCH</b>			
F-statistic	102.6401	Prob. F(1,2680)	0.0000
Obs*R-squared	98.92792	Prob. Chi-Square(1)	0.0000

In table 2.1, the mean equation of ARCH (1) shows that the P value of SP500 (-1) is significant which explains that previous day return helps to predict the today's return and the negative value of coefficient of SP500 (-1) reveals that today's return 26.78% is less than the previous day return. In variance equation of ARCH (1), the P value of RESID (-1) <sup>2</sup> 0.0000 is significant which shows that today's volatility can be explained on the basis of past price behavior and the value of coefficient of residual is positive which shows that 55.35% today volatility is high as compare to previous day volatility. In table 2.2 the P-value of GARCH (-1) is significant which represents that today's volatility is affected due to the previous day volatility and the coefficient of GARCH (-1) is positive which represent that 87.81% last day volatility transfer in next day.

**Table 2.1. ARCH Results**

Country	Mean Equation			Variance Equation		
	Variable	Coefficient	Prob.	Variable	Coefficient	Prob.
Pakistan	KSE(-1)	0.104343	0.0000	RESID(-1) <sup>2</sup>	0.455952	0.0000
India	SENSEX(-1)	0.029469	0.0202	RESID(-1) <sup>2</sup>	0.429852	0.0000
Sri Lanka	ASPI(-1)	0.250614	0.0000	RESID(-1) <sup>2</sup>	0.486348	0.0000
France	CAC40 (-1)	-0.049524	0.0001	RESID(-1) <sup>2</sup>	0.309144	0.0000
Germany	DAX (-1)	-0.026127	0.0272	RESID(-1) <sup>2</sup>	0.289661	0.0000
Canada	SPTSX(-1)	0.263172	0.0000	RESID(-1) <sup>2</sup>	0.478863	0.0000
Italy	FTSE(-1)	-0.073336	0.0000	RESID(-1) <sup>2</sup>	0.321800	0.0000
Russia	RTS(-1)	0.191394	0.0000	RESID(-1) <sup>2</sup>	0.369793	0.0000
Japan	NIKKEI225(-1)	-0.156931	0.0000	RESID(-1) <sup>2</sup>	0.356998	0.0000
United States	SP500(-1)	-0.267827	0.0000	RESID(-1) <sup>2</sup>	0.553546	0.0000
United Kingdom	FTSE(-1)	-0.084271	0.0000	RESID(-1) <sup>2</sup>	0.476465	0.0000



**Table 2.2. GARCH Results**

Country	Variable	Coefficient	Prob.
Pakistan	GARCH(-1)	0.773793	0.0000
India	GARCH(-1)	0.895471	0.0000
Sri Lanka	GARCH(-1)	0.762035	0.0000
France	GARCH(-1)	0.893073	0.0000
Germany	GARCH(-1)	0.893102	0.0000
Canada	GARCH(-1)	0.906454	0.0000
Italy	GARCH(-1)	0.911877	0.0000
Russia	GARCH(-1)	0.884442	0.0000
Japan	GARCH(-1)	0.864367	0.0000
United States	GARCH(-1)	0.878105	0.0000
United Kingdom	GARCH(-1)	0.877042	0.0000

## 6. Conclusion

This study concludes that Borsa Italiana Exchange (Italy) is the most volatile stock market because 91.19% previous day volatility transfer in next day while Colombo Stock Exchange (Sri Lanka) is less volatile because 76.20% previous day volatility transfer in next day. The finding shows that stock markets of Group of Eight Countries are more volatile than the South Asian Stock Markets. This study also concludes that South Asian stock markets return is higher when comparing with previous day return.

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## **A Comparison of Financial Performance of Domestic and Foreign Banks in Kosovo by Using DuPont Model**

**Driton Balaj**<sup>1</sup>

**Abstract:** The aim of this study is to compare financial performance of the domestic and foreign banks in the banking sector of Kosovo during the period of 2001-2007. We will use the DuPont financial analysis model to measure the comparative performance between domestic and foreign banks. Through this model, we have shown the factors that has driven banks to higher or lower Return on Equity (ROE). The research results show that foreign banks have been more efficient and profitable, thus having a higher ratio of Return on Assets (ROA) and Return on Equity (ROE). The foreign banks' high ratio of Return on Equity is a result of a higher interest margin (PM), which indicates that foreign banks have made a better costs management and a larger use of financial leverage. Moreover, the results indicate that despite the domestic banks' higher ratio of Assets Utilization (AU) compared to foreign banks, the main factor that has contributed to worsening of domestic banks' profitability was the high costs of loans provisioning due to poor quality of the loan portfolio. This outcome suggests that domestic banks mostly had clients with less creditworthy and did not possess the adequate techniques to manage loan risk as foreign banks have

**Keywords:** Return on equity; Return on assets; Net profit margin; Asset utilization; Equity multiplier,

**JEL Classification:** G21; G24

### **1. Introduction**

The banking system in Kosovo is the most important sector within the financial system built after the war through quite a liberal license granting system. Their operations are based on the universal principle of banks delivering a wide range of financial services to businesses, individuals and institutions.

Given that the non-banking financial institutions are not developed and their role as intermediary institutions in channeling financial savings on investments is irrelevant, commercial banks are almost the only source of funding.

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This shows that Kosovo's economy, particularly small and medium enterprises' large dependence on commercial banks. Therefore, the development of the banking sector and the improvement of their financial performance contribute to economic growth through their financial intermediation role.

A characteristic feature of the Kosovo's banking sector that differs from other banking systems of transition countries is that it was established with the entry of foreign banks.

Thus, a proper commercial banking was firstly created in 2000 - 2001 through the entry of private banks with foreign capital. Market share of banks with foreign capital has steadily increased as the improvement of banking services and competition did. Given that the establishment of Kosovo's banking system started with foreign banks, this has also allowed foreign banks to have a larger access in deposits and customers' trust.

We may therefore highlight that the increase of foreign banks' share has led to a greater stability in the financial sector and has provided for a wider range of financial services and new banking techniques.

The banking sector's performance assessment is vital to a new banking system set up without any experience in the modern banking because the failure of the banking system may result in a series of negative impacts on the depositors, other financial institutions, businesses and the economy as a whole. Therefore, in-depth analysis of the banking sector's performance assessment is more than necessary. This is the reason behind the research on the Kosovo banking sector's financial performance by using the DuPont financial analysis model.

## **2. Literature Overview**

Many researchers have been made looking into the financial performance assessment of banking sector in different countries. Usually, the banks' performance has been assessed through accounting approaches using the financial ratios and the econometric approach. The accounting methods use financial ratios for assessing the banks' performance.

Moreover, the DuPont model, as a financial analysis technique, is primarily used as a tool to analyze financial ratios of the companies or industry. This model was later used for assessing the banking sector's performance according to an upgraded version Cole, 1973, Dietrich (1996), Saunders (2000), Koch and MacDonald 2002 and Vessel et al (2004) taking into account the specifics of the activity of banks as well as the balance sheet and their success.

There is quite a rich literature when it comes to the assessment of domestic and foreign banks' performance.

Claessens, Demirguc-Kunt and Huizinga (2001) studied the performance of domestic and foreign banks in eighty countries including developing and developed countries from 1988-1995. They examined how the net profit margin, overhead expenses, taxes paid and profitability differs between domestic and foreign banks and found that foreign banks perform better in term of profitability in developing countries, but it's totally the opposite in developed countries.

Demirguc-Kunt and Huizinga (1999) present similar results. They show that foreign banks have generally higher profits and margins compared to domestic banks in developing countries, while the opposite is true in industrial countries.

Sabi (1996) compared the performance of foreign and domestic banks in the process of transition into a market-oriented economy in Hungary. This study shows that foreign banks are more profitable than domestic banks and did not expose to a greater liquidity or credit risk the results indicate that foreign bank profitability is higher than the average profitability of the domestic banks although importantly, in the post-crisis period, the gap between foreign and domestic profitability become closer.

Chantapong (2005) by studying domestic and foreign bank performance in Thailand concluded that foreign banks are more profitable than the average domestic banks' profitability.

Havrylchuk and Jurzyk (2006) Paper on Profitability of Foreign and Domestic Banks in Central and Eastern Europe: Does the Mode of Entry Matter? Where data for 265 banks in the Central and Eastern European Countries for the period of 1995-2003 have been used, analyses the differences in profitability between domestic and foreign banks. They show that foreign banks, especially Greenfield institutions, earn higher profits than domestic banks.

Kraft, Hofler and Payne (2006) studied the Croatian banking system and found that the new private and privatized banks are not more efficient than public banks and that privatization does not immediately improve efficiency, while foreign banks are substantially more efficient than all domestic banks.

In regard to researches on the domestic and foreign banks' performance in Kosovo, the literature is that rich.

Toçi (2009) studied the efficiency of banks in South-East Europe with special reference to Kosovo by using non-parametric methodologies. He showed that foreign banks were more efficient than domestic ones.

Balaj (2011) studied the impacts of the foreign bank's presence on the performance of domestic banking sector in Kosovo by using OLS regression technique. He has find that the foreign banks have higher net interest margin and profit than the domestic.

### **3. Research Objectives**

The main purpose of this paper is to assess and compare the financial performance of domestic and foreign banks in Kosovo. The second purpose of this research is to reflect the factors that have had a positive and negative impact on the Return on Equity of domestic and foreign banks.

### **4. Methodology and Data Sources**

In order to reach the objectives of this research, I will use the DuPont financial analysis model to assess and compare the financial situation between the domestic and foreign banks in the Kosovo's banking market.

This model has also been used in assessing the banking sector's performance, but in a version modified by various writers as Cole 1973, Dietrich 1996, Saunders (2000), Koch and MacDonald (2002), Vensel et al. (2004), taking into account the specifics of the activity of banks as well as the balance sheet and their success.

The data used in this paper are provided by the Central Bank of Kosovo and include annual records from the balance sheet and income statements of banks.

Seven banks are included in this research, out of which five are domestic banks and two foreign banks dating from 2001 to 2007. This research period may be deemed as a short-term one to give significant results. But, in early 2008, the structure of Kosovo's banking system changed and there are only two domestic banks and four foreign banks.

The reason for conducting this researching on such a short period of time by using the DuPont model is to reflect the factors that led to worsening of the domestic banks' performance.

### **5. Establishment and Development of Banking System in Kosovo**

By the end of 1999 Kosovo started with the political, economic and social establishment and transformation with the aim of integrating into the European Union. Regardless of the efforts and achievement made over the last years, the Kosovo economy is still facing structural and law enforcement problems.

The establishment of new relevant institutions included the banking system as well. After the war, Kosovo was administered by the United Nations Organisations. Hence, the international and national authorities engaged to establish a banking sector in accordance with international standards and creating a suitable environment to attract foreign capital into the financial sector. The result thereof

was the establishment of the Banking and Payments Authority of Kosovo in 2019, which in 15 of June 2008 was transformed into the Central Bank of the Republic of Kosovo.

Central Bank of Kosovo is the highest authority in the financial system operating as the regulatory and oversight authority on commercial banks. In April 1999, the legal framework (Regulation no.1999/21 on the Banking and Payments Authority of Kosovo) was established for the licensing of banking and non-banking institutions. This regulation paved the way to the process of licensing new private banks and regulating the banking system by the Central Bank.

This legal framework allowed the entry of foreign banks and other financial institutions into the financial sector of Kosovo which also marked the creation of the Kosovo banking system.

Notwithstanding the difficulties in the establishment of the banking system, which were justified with the poor professional qualification, scarce legacy in the banking area and poor institutional management in general, the Kosovo banking system's development over the years is vulnerable in some respects, where the institutional framework, the banking system and loaning services have made progress. The ownership structure of the banking system as of the end of 2007 consisted of two foreign-owned banks and four domestic banks with private capital, while in early 2008 we have six foreign banks and two domestic banks.

Kosovo banking sector's structure has changed over the years. In 1999, there was no bank operating in Kosovo and all the functions of commercial banks were performed by the Banking and Payments Authority of Kosovo. In 2007, there were seven commercial banks operating in Kosovo, out of which five had a domestic capital and two had a foreign capital, as shown in the Table 1.

This indicates that the banking sector during the research period had the lowest number of banks with foreign capital in the region, which shows the foreign investors' less interest in the banking market in Kosovo.

**Table 1. The Kosovo Banks' ownership structure (number of banks)**

Ownership	2001	2002	2003	2004	2005	2006	2007
Domestic Banks	-	5	5	5	5	4	2
Foreign Banks	2	2	2	2	2	2	5

Source: Central Bank of Kosovo <http://www.bqk-kos.org>

In regard to the banking sector's size related to assets, foreign banks manage the largest part (75%) of the total assets of the banking sector, while domestic banks manage only 24% of the banking sector assets as of the end of 2007. See Table 2.

Domestic banks have had an increasing trend in their funds share until 2014. After 2005, particularly 2006 when the Credit Bank bankrupted, there is a decline of the shares in the banking sector's funds and a decreased number of domestic capital banks from five to two. Large banking market domination by the foreign banks is noticed in the category of loans and deposits, which represent 77% of the banking sector loan and 59% of the total banking sector deposits

**Table 2. Structure of funds, deposits, and loans of domestic and foreign banks**

	2001	2002	2003	2004	2005	2006	2007
<b>Foreign Banks</b>							
Assets	74%	73%	64%	62%	66%	71%	75%
Loan	44%	41%	52%	56%	66%	73%	77%
Deposit	51%	54%	56%	57%	58%	59%	59%
<b>Domestic Banks</b>							
Assets	26%	27%	36%	38%	34%	29%	24%
Loan	56%	59%	48%	44%	34%	27%	23%
Deposit	49%	46%	44%	43%	42%	41%	41%

*Source: Author's calculation*

## 6. Banks Performance Assessment through DuPont Model

One of the most important goals of the banking sector is to achieve high profit ratios as a result of the banks intermediary activities between lenders and borrowers. The main policy of commercial banks is to earn the highest profit changing between the active and passive interest or by directly participating in the economic activity.

Earning a high profit to an acceptable risk is not a target easily achievable by shareholders/owners of the bank because they need to have professional staff to achieve it.

In order to measure efficiency and performance, many authors have used financial ratios such as the Return on Equity ratio and Return on Assets, as tools for measuring the banks' profitability.

In order to see how banks in Kosovo have performed during the research period and assess the banking sector, we will provide a financial analysis by using the DuPont model. The DuPont financial analysis model is based on Return on Equity (ROE).

Return on equity (ROE) means not only a figure that indicates the return on capital but it also implies a complex variable, which we should break down in order to see the factors that have led to ROE.



The DuPont model, as a financial analysis technique, is used to analyze financial ratios of the companies or industry and to assess the banking sector's performance according to an upgraded version Cole, 1973, Dietrich (1996), Koch and MacDonald 2002 and Vensel et al (2004) taking into account the specifics of the activity of banks as well as the balance sheet and their success. In addition, Saunders (2000) provides a model of financial analysis for financial institutions based on the DuPont system of financial analysis Return on Equity model. Based on the DuPont financial analysis model, Return of Equity is affected by three factors: the Profit Margin (PM), Assets Utilization (AU) and Equity multiplier (EM).

The starting point for applying the DuPont model to analyze the bank performance is the calculation of the Return on Equity ratio.

$$\text{Return on Equity (Roe)} = \frac{\text{NetIncome}}{\text{TotalEquity}}$$

The Return on Equity measures the income the bank earns for each euro of capital invested in the bank. Banks that report high ratios of Return on Capital show that the Return on Equity (ROE) is linked to the Return on Assets (ROA) by the equity multiplier (EM), which is equal to the total funds compared to the total capital as follows:

$$\text{ROE} = \text{ROA} * \text{EM}$$

$$\text{ROE} = \frac{\text{NetIncome}}{\text{TotalAssets}} \times \frac{\text{TotalAssets}}{\text{TotalEquity}}$$

Thus, the equation shows that a higher or lower ratio of Return on Equity may be obtained by either increasing ROA or by increasing the financial leverage (EM).

Return on assets measures the banks profit for each unit of invested funds. It indicates the management of efficiency in using its assets to generate earnings.

Equity Multiplier (EM) of the bank compares the funds in relation to the bank's capital, where the high value of this equity multiplier shows the highest amount of financing through debt in relation to the shareholders' equity. The high EM ratio may lead to the increase of ROE but also the risk a bank bankrupt (Peter Rose 2002).

The second step in breaking down ROE consists in breaking down the Return on Assets (ROA) to Profit Margine and Assets Utilization (AU).

$$\text{ROA} = \frac{\text{NetIncome}}{\text{Totaloperatingincome}} \times \frac{\text{Total operating Income}}{\text{Totalassets}}$$

$$\text{ROA} = \text{PM} \times \text{AU}$$

Profit Margin (PM) shows the amount of after tax profit that the bank is able to generate for every euro of earned income. The profit margin is obtained by dividing net income by total income.

This ratio provides us with very important information about the efficiency of banks, which during their businesses could achieve a higher profit margin if they would be able to control costs and keep loan losses to a low level.

In order to show that the banks' efficient management of their expenditure, it is necessary to break down the operating costs components as well: Interest Expense ratio, Non-interest expense ratio, Provisions for loan loss ratio and Tax ratio (Saunders (2000)

Assets Utilization (AU) is another very important component having an impact on ROA.

Assets Utilization ratio indicates the extent of efficiency in using assets to generate earnings. Assets Utilization ratio is obtained by dividing total income with total assets. The greater the use of assets is the greater is the bank's ability to generate earnings from their assets.

Assets Utilization is influenced by the risk management practices of the bank interest rate, liquidity management and the structure of assets (Koch et al 2002)

## 7. Analysis of Financial Performance of Banks in Kosovo by Using DuPont Model

The results of the domestic and foreign banks' performance analysis based on DuPont model are presented in the following Tables 3 and 4.

**Table 3. Analysis of domestic banks' performance through DuPont model**

Financial Ratios	2001	2002	2003	2004	2005	2006	2007	Average
Return on Equity (in %) ROE	0.40%	11.19%	14.72%	10.49%	5.45%	4.53%	9.77%	8.08%
<b>The components of ROE= ROA x EM</b>								
Return on Assets (in %) ROA	0.02%	1.28%	1.74%	1.17%	0.54%	0.46%	1.22%	0.92%
Equity multiplier ( in times)	16.41	8.75	8.47	9.00	10.01	9.87	7.98	10.1
<b>The Components of ROA= PM x AU</b>								
Profit Margin (in %) PM	1.76%	13.21%	17.28%	11.45%	4.87%	4.87%	12.07%	9.36%
Asset Utilization (in %) AU	1.37%	9.70%	10.06%	10.27%	11.32%	9.48%	10.12%	8.90%
<b>The Components of Pm = IE+ OE+PLL+ Tax / Total Asset</b>								
Interest expense (in %) IE	0.19%	0.76%	1.10%	1.52%	1.92%	1.73%	1.75%	1.28%

Noninterest expense (in %) OE	0.98%	5.46%	5.10%	4.78%	5.55%	5.07%	5.11%	4.58%
Provision for loan loss ratio (in %) PLL	0.16%	1.96%	1.73%	2.45%	3.22%	1.80%	2.04%	1.91%
Tax (Tax)	0.02%	0.24%	0.39%	0.37%	0.09%	0.42%	-0.01%	0.22%
<b>The Components of AU = II+ OI / Total Asset</b>								
Interest income (in %) II	0.51%	4.91%	6.09%	6.86%	7.75%	6.21%	6.67%	5.57%
Noninterest income (in %) OI	0.86%	4.79%	3.97%	3.41%	3.57%	3.28%	3.45%	3.33%

Source: author's calculations

**Table 4. Analysis of foreign banks' performance through DuPont model**

Financial Ratios	2001	2002	2003	2004	2005	2006	2007	Average
Return on Equity (in %) ROE	54.62%	5.80%	15.61%	26.86%	28.59%	26.81%	29.61%	26.84%
<b>The Components of ROE= ROA x EM</b>								
Return on Assets (in %) ROA	1.74%	0.31%	0.82%	1.83%	1.79%	2.25%	2.78%	1.65%
Equity multiplier ( in times)	31.43	18.56	18.97	14.65	15.98	11.91	10.64	17.45
<b>The Components of ROA= PM x AU</b>								
Profit Margin (in %) PM	43.48%	5.40%	10.99%	22.13%	20.37%	22.35%	24.48%	21.32%
Asset Utilization (in %) AU	4.00%	5.79%	7.49%	8.29%	8.78%	10.08%	11.37%	7.97%
<b>The Components of Pm = IE+ OE+ PLL+ Tax / Total Asset</b>								
Interest expense (in %) IE	0.27%	0.72%	0.78%	1.04%	1.38%	1.71%	1.89%	1.11%
Noninterest expense (in %) OE	1.77%	4.24%	4.53%	4.54%	4.72%	4.58%	4.92%	4.19%
Provision for loan loss ratio (in %) PLL	0.10%	0.22%	1.07%	0.68%	0.42%	0.93%	1.02%	0.64%
Tax (Tax)	0.11%	0.29%	0.29%	0.19%	0.47%	0.60%	0.75%	0.39%
<b>The Components of AU = II+ OI / Total Asset</b>								
Interest income (in %) II	1.68%	3.34%	4.71%	6.46%	7.49%	8.23%	9.00%	5.84%
Noninterest income (in %) OI	2.32%	2.45%	2.78%	1.83%	1.29%	1.85%	2.37%	2.13%

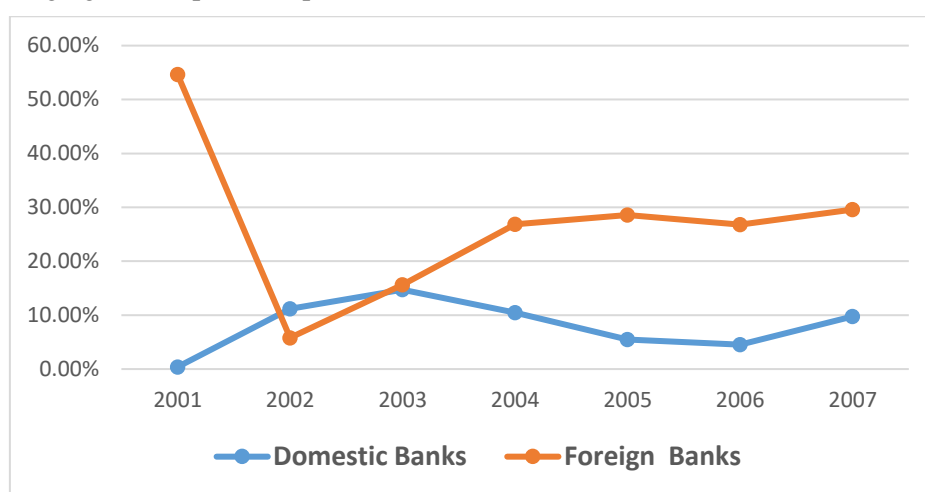
Source: Author's calculations

The results presented above show that both domestic and foreign banks did not record any negative return on equity and assets during the research period.

However, foreign banks were more profitable than domestic banks, where the average return on equity and assets ratios for the period 2001-2007 to foreign banks was 26.84% and 1.65%, whilst 8.08% and 0.92% to the domestic ones.

Foreign banks have achieved a higher return on equity ratio than domestic banks during the period, except for 2002 when the domestic banks' ROE was 11.19 % and the foreign banks' ROE was 5.80%.

Foreign banks have had an increasing trend since 2003, whilst domestic banks have had a significantly increasing trend since 2001-2003, which afterwards suffered a decline since 2004. This shows that foreign banks have been more efficient in managing their capital compared to domestic banks.



**Figure 1. Return on Equity (ROE) 2001-2007**

*Source: Author's calculations*

The broken down return on equity (ROE) ratio shows that the domestic banks' low profitability was due to the return on assets (ROA) by 0.92% and equity multiplier (EM) by 10.1 times. Meanwhile, the high increase in foreign banks' ROE was generated by ROA of 1.65% and the equity multiplier of 17.45 times.

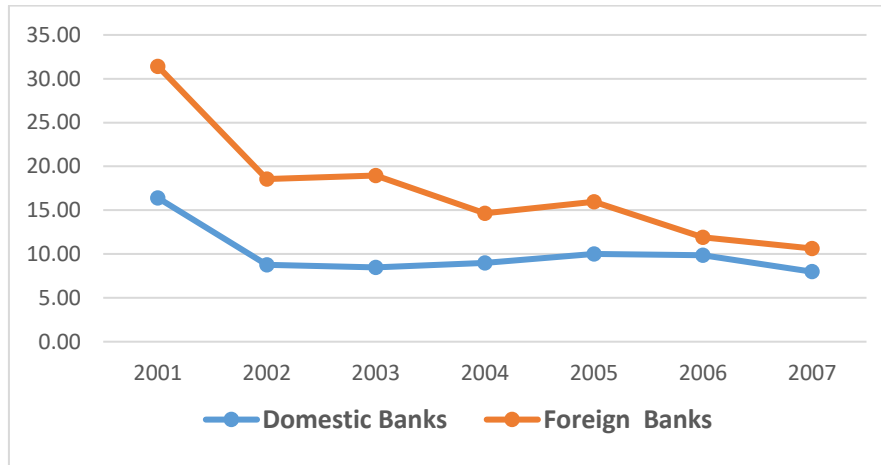
Based on the results described above, we may conclude that foreign banks not only had higher return on assets ratio, but the high return on equity (ROE) ratio was due to a larger use of financial leverage rather than the profitable use of assets.

This shows that foreign banks were more efficient in managing their capital compared to domestic banks, but also a higher risk.

The financial leverage ratio for the 2001 to 2007 period shows that foreign banks have a higher financial leverage ratio of 17.45 compared to the domestic banks with 10.1 times.

As a result of the high financial leverage ratio, it is clearly evident that the foreign banks have been able to generate a higher ROE than the domestic banks.

The equity multiplier presented also in the figure below shows that foreign banks have had higher level of risk than domestic bank.



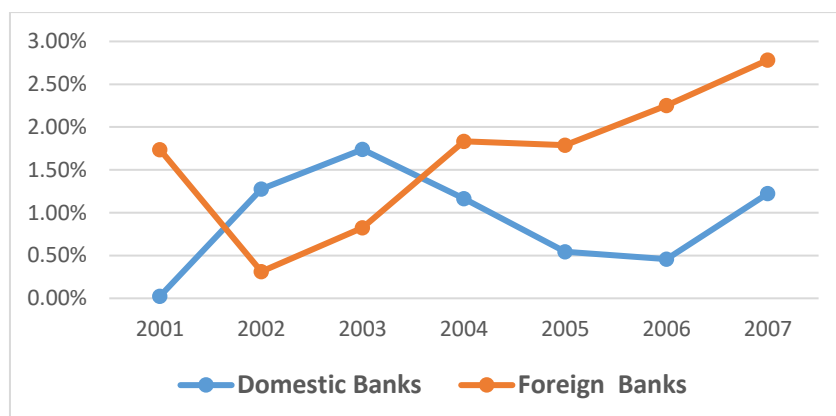
**Figure 2. Equity Multiplier (EM) 2001-2007**

*Source: Author's Calculations*

In regard to the return on asset ratio as a measure of performance and a generator of the return on equity during 2001- 2007, as seen from the Tables 3 and 4 and Figure 3, foreign banks have generated an averagely higher return on assets ratio 1.65% than the domestic banks 0.92%

During 2002 and 2003, domestic banks had a higher of return on assets ratio compared to foreign banks. But from 2004 to 2007, the domestic banks' return on assets has had a declining trend.

Foreign banks have had a continuously growing trend of the return on assets ratio, except for 2002 when there was a decline from 1.74% to 0.31%. This continuously growing trend of foreign banks' ROA has positively contributed to the growth of ROE.



**Figure 3. Return on Assets (ROA) 2001-2007**

*Source: Author's calculations*

In addition, the results obtained from breaking down ROA into profit margin and asset utilization shows that the domestic banks recorded an average profit margin (PM) of 9,36 %, whilst foreign banks 21.32 %. Domestic banks have had a declining trend of PM from 2004 to 2007, whilst foreign banks reported an increase in PM in 2001, after a decline in 2002, which then continued to have a growing trend until 2007 (see Figure 4).



**Figure 4. Profit Margin (PM) 2001-2007**

*Source: Author's calculations*

This high rate of foreign banks' profit margin shows that they were able to better control costs and loan loss compared to the domestic banks.

This finding is also supported by the results obtained by breaking down the overheads components, which have an impact on the profit margin (PM). During 2001 -2007, the overheads of domestic and foreign banks increased significantly as a result expanding their activities by opening branches and banking subsidiaries as well as investing in technology and human resources.

However, domestic banks have had more overheads (non-interest) against total assets than foreign banks. This was due to the opening of a larger number of bank branches and sub-branches and the larger number of employees compared with foreign banks.

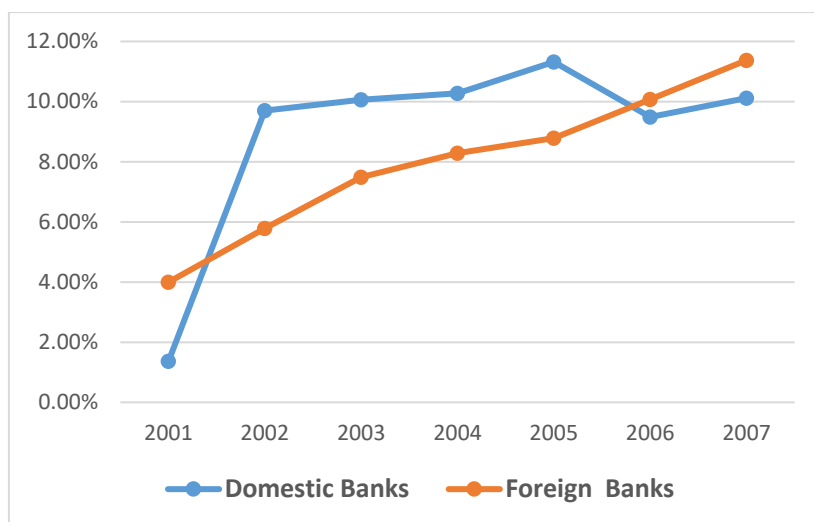
Many important factors that have driven foreign banks to higher average PM ratios were: low provisions of loan losses over total assets by 0.64%, while domestic banks' were 1.91%; better control of interest cost by 1.11%, while domestic banks' were 1.28% and better control of non-interest expenses where foreign banks have had on average of 4.19% compared to domestic banks that had 4.58%. This indicates that foreign banks had the lowest rate of costs, meaning that foreign banks have had a better control of costs and were more profitable.

On the other hand, the main factor leading to the reduction of the profit margin and the decline of domestic banks' ROA and ROE is the large increase in provisions of loan loss due to poor quality of the loan portfolio from year to year. In 2004 and 2005 there was a significant increase of provisions by 2.45% and 3.22%.

The increased loan loss provisions can be supported with the assertion that domestic banks have mostly had clients with smaller lending capacities and did not possess the adequate techniques to manage loan risk as foreign banks did.

In regard to assets utilization during the period 2001- 2007, as shown in Table 3 and 4, domestic banks have achieved a higher average Asset Utilization ratio 8.90% than the foreign banks 7.97%. This shows that domestic banks have been able to obtain high assets yields.

Domestic banks have had a growing trend in the use of assets from 2002 to 2005, and foreign banks have achieved higher yields than domestic banks in 2001, 2006 and 2007 by 4.0%, 10.8% and 11.37% respectively (see Figure 5).



**Figure 5. Assets Utilization (AU) 2001-2007**

*Source: Authors' calculation*

The results presented Tables 3 and 4 by breaking down the total operation income and to interest and non-interest income, which have an impact on AU, shows that during the period 2001 -2007 domestic banks had an averagely lower interest income ratio 5.57% compared to foreign banks 5.84 %.

When it comes to the non-interest income component, we notice that domestic banks had an averagely higher non-interest income ratio over total assets of 3.33% compared with foreign banks 2.13%.

Therefore, we may say that domestic banks' non-interest income is one factor that influenced the high assets utilization ratio.

Our conclusion is that the difference in the assets utilization between domestic and foreign banks is as a result of the larger loan share in relation to total assets. Hence, although domestic banks have issued fewer loans in general, the loan share in their total assets was higher than those of foreign banks.

During 2001 - 2007, the loan share in total assets of the domestic banks averaged to 47%, whilst the loans share in total assets of foreign banks was 37 % (see Table 2)



## 8. Conclusion

To evaluate and compare the performance of domestic and foreign banks for the period 2001-2007 in this study we used DuPont model. According to DuPont model the return on equity of banks is influenced by three factors: Profit margin (PM), Assets utilization AU and Equity Multiplier (EM).

Our results show that foreign banks have higher ratio of Return on Equity and Assets. The foreign banks' high ratio of Return on Equity is a result of a higher interest margin (PM), which indicates that foreign banks have made a better costs management and a larger use of financial leverage.

Moreover, the results indicate that despite the domestic banks' higher ratio of Assets Utilisation (AU) compared to foreign banks, the main factor that has contributed to worsening of domestic banks' profitability was the high costs of loans provisioning due to poor quality of the loan portfolio

The increased loan loss provisions can be supported with the assertion that domestic banks have mostly had clients with less creditworthy and did not possess the adequate techniques to manage loan risk as foreign banks have.

Further work could be focused on the identification of factors that affect ROE and ROA indicators by using econometric.

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## Financial Analysis of the Financial Institutions Sector in Kosovo

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**Abstract:** Paper work “Financial analysis of the financial institutions sector in Kosovo” treats financial sector in Kosovo. Paper work contains the current position of the economy, economic prospects and macroeconomic projections for the financial sector in Kosovo, future potential and possibilities of financial sector in Kosovo. The main goal of this research is financial analysis of Kosovo financial institutions sector - overview of key indicators. This research evaluates the performances of commercial bank’s profitability, which have operated in the market during the period 2006-2012. This research is conducted through financial analysis coefficients: Return on Equity, Return on assets and Cost to Income. Test *t*-Student is used to analyze the profitability for the period 2006/2007 before the financial crisis and the period 2011/2012 after financial crisis.

**Keywords:** financial sector; commercial banks; profitability performance; economic prospects

**JEL Classification:** G21

### 1. Introduction

In the last period, the financial sector faced significant progress. Major advances have been achieved in many areas. The greatest improvement observed significantly to public finance management; macro-economic environment has been stable and has adopted a sounded legal framework that favors a liberal market economy. Central Bank of the Republic of Kosovo has a significant role on

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supervision of the banking sector, micro finance institutions, insurance companies, exchange offices and pension funds, mainly to implement credit policy in banking system in Kosovo. Commercial banks offer a wide range of products and services including: loans, guarantees, different types of accounts, domestic and international payments, and other services. The banking sector in Kosovo faced a significant growth rate in the past and it is expected that these positive growing rates will continue in the future.

## **2. The Main Goal of this Research**

This paper tend to analyze the financial institution sector in Kosovo. This research evaluates the performances of commercial bank's profitability, which have operated in the banking market during 2006-2012. This research will be conducted through financial coefficients stated below: Return on Equity (ROE), Return on Asset (ROA) and Cost to Income (C/I). T test-will be used to analyze and compare the profitability of the period 2006/2007 the period before financial crisis with the period (2011/2012) after financial crisis. The sample used includes commercial banks operating in Kosovo: Pro Credit Bank, Raiffeisen Bank, Bank for Business, Lubljanska Nova Banka and Economic Bank (Reports, 2006-2012).

## **3. The Current Position of the Economy**

Kosovo has made significant progress in many areas in the post-war period, where the financial sector is established from scratch. During this period, significant progress is achieved in the financial sector, there is a significant improvement on management of public finances; macro-economic environment has been stable and has adopted a good legal framework that favors a liberal market economy. With the help of the donor community, the Central Bank of Kosovo today is established to oversee the banking sector, micro finance institutions, insurance companies, exchange offices and pension funds. While these banks lending activity has played a crucial role in the economic development of Kosovo, another important function played payment system which contributed on lowering the cash transactions in the economy.

These high rates of unemployment have also contributed to high rates of poverty (around 45%) and extreme poverty (around 15%).

**Table 1. Budget Revenues (in millions of euros)**

Description	2006	2007	2008	2009	2010	2011
Tax Revenues	620	714	805	816	894	1,060
Non-tax Revenues	92	117	165	328	231	203
Total budgetary revenues	712	891	970	1,143	1,125	1,263

Source: (Ministry of Economy and Finance)

#### 4. Economic Perspectives

In order for Kosovo to reduce the high rates of unemployment, improve its trade balance by increasing exports and substitute imports and to reduce the incidence of poverty, higher increasing rates are needed

However, it should be noted that long ago there was the idea of involving the private sector in generating capacity, but still not enough progress has been made. The government has also approved the strategy for involving the private sector in the field of telecommunications. It is believed that this project will potentially attract any well-known companies in this market and if successfully completed, will not only provide additional funding for the activities of government spending, but will also send positive signals to the Kosovo market attractiveness for other potential investors. Another important priority, as defined in the statement of government priorities, will be the Education field. In recent years, significant investments have been made to build new schools and more investment is still expected. The Ministry of Education is working on curriculum to ensure that it reflects the new market circumstances and strengthened the criteria for private higher education. It is therefore expected that in the long run, improve the quality of education and to reflect market needs.

#### 5. Macroeconomic Projections

Based on macro projections of the Ministry of Finance, is expected over the next three years, Kosovo's economy to grow at an average rate of 5.5%, where investments are expected to have the highest contribution, followed by the contribution of exports and consumption then. It is important to note that in the recent publication by the World Bank and the IMF, it is suggested that Kosovo is among those European countries with growth rates higher and expect in the future to have good growth rates.

**Table 2. Projections of key macroeconomic indicators, 2009-2014 (in millions of EUR)**

Description	2009	2010	2011	2012	2013	2014
Gross domestic product GDP (mln EUR)	3,912	4,289	4,640	4,977	5,214	5,500
Consumption	4,280	4,760	5,074	5,336	5,545	5,819
Investments	1,166	1,213	1,433	1,620	1,704	1,756
Export	612	820	875	933	995	1,049
Import	2,146	2,504	2,742	2,912	3,030	3,124
Real GDP growth	2.90%	4.00%	5.30%	5.10%	5.40%	6.00%
Inflation	-2.40%	3.50%	5.30%	2.10%	1.50%	1.40%
Remittances	356	42	430	453	477	507

*Source: (KASH 2011-2013, Ministry of Finance)*

## 6. Research Methodology and hypotheses

In order to conduct this research is used descriptive analysis – as well as descriptive financial coefficients which explain the banks performance in Kosovo during 2006/2007 and 2011/2012. For this research are used secondary data taken from annual reports of commercial banks for the reporting period of seven years. This research focuses mostly on comparing the values of the movement during the financial years (2006/2007) before the financial crisis, and the period between the years (2011-2012).

In order to verify if there is a statistical significant difference in performance of profitability of the banks during 2006-2007 compared to 2011-2012, this research applies the Student t test. T-test is applied to test the hypothesis that the averages of these two periods are the same for all variables applied in this research. This distribution is named W.S. Gosset based author, who in 1908 found similar to the distribution of normal and whose published under the pseudonym Student (Nuhju, 2005). Therefore in theory and in practice is known as Student distribution and denoted by the letter **t**.

In this case the hypothesis is zero.

**H<sub>0</sub>:  $\mu_1 = \mu_2$**

The alternative hypothesis can be introduced through the non-reconciliation:

**Ho:  $\mu_1 \neq \mu_2$** 

This research was conducted including commercial banks which have operated in the banking market in the period 2006-2012. Considering the sample includes commercial banks operating in Kosovo: PCB, RBKO, BPB, EB, NLB.

**7. Research Variables**

Profitability Performance - The coefficients key profitability measure performance are:

- a. Return on Equity (ROE) - net profit/total equity. This ratio is the best indicator of profitability and growth potential. Represents the rate of return to shareholders of the bank.
- b. Return on assets (ROA) - net profit/total assets. This ratio shows how much net profit is generated for each 1 € real bank. The higher the ROA, more profitable is a bank, i.e. how well the bank's assets are managed in order to maximize returns.
- c. Cost to Income (C/I) - total costs/total revenues. This ratio shows how expensive it is for the bank to produce a unit of output (revenue, profit). The lower the coefficient of C/I, the higher the performance of the bank is.

**8. Results of the Survey**

Performance analysis of profitability - Performance of the banking sector profitability in Kosovo during 2006/2007 and 2010/2011 is measured with these coefficients measured by: Return on Equity, Return on assets and Cost to Income.

**Table 4. Performance of profitability during the period 2006-2012**

<b>Coefficients (%)</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>Mean ROE</b>	-25.4	25.5	20.2	13.2	10.8	7.8	-2.2
<b>Mean ROA</b>	-1.1	3.3	2.3	1.3	1.1	0.9	0.3
<b>Mean C/I</b>	107.1	74.7	78.6	86.3	88.5	90.1	96.2

## 9. Testing of Hypotheses

To analyze the performance of the banking sector's profitability in the period before the global financial crisis, during the years 2006 - 2007, the time of last years 2011 - 2012, we applied the Student *t* Test to test the hypothesis whether the averages of these two periods are same for the three variables discussed above and analyzed.

**Table 5. Results of Student *t* test period (2006/2007 and 2011/2012)**

	Performance of profitability		
	ROE	ROA	C/I
Mean 2006/2007	0.04%	1.12%	90.87%
Mean 2011/2012	2.81%	0.62%	93.17%
Value 'P'	0.427193	0.317785	0.71252
Alfa	0.05	0.05	0.05
The decision on the hypothesis	The hypothesis is accepted	The hypothesis is accepted	The hypothesis is accepted

From the data presented in the table above, the average ROE for the period 2006/2007 was 0.04% compared with 2011/2012, which has grown to 2.81%. Whereas the average ROA for the period 2006/2007 was 1.12% compared to 2011/2012 is reduced to 0.62%. While the average C/I in 2006/2007 was 90.87% and in recent years has increased by 93.17%. Regarding the value "P" for each coefficients have the following results: ROE values for "P" is 0.427193, for ROA value "P" is 0.317785, while the C/I value "P" is 0.71252. From these data we can say that the performance difference between profitability to pre-crisis period, the last period (during 2011/2012) is not statistically significant, since the values "P" have value "Alfa" that is 0.05/2 because the test is two side, i.e. the region of rejection of the hypothesis zero located on the two ends of the normal curve. Based on the results we can say that the zero hypothesis should be accepted.

## 10. Summary

- In this paper is discussed for financial sector, where significant progress is visible in many areas. Greater improvements observed significantly to the management of public finances; macro-economic environment has been stable and has adopted a good legal framework that favors a liberal market economy.
- The survey was conducted through descriptive analysis - descriptive financial coefficients, to explain the performance of banks in Kosovo during the period 2006 - 2012. The data for this research are secondary data and are taken from annual reports of commercial banks for seven years reporting.



- In this research through the analysis of financial coefficients: ROE, ROA and C/I is using student t-test to analyze the profitability for the period 2006/2007 compared to 2011/2012 period. Considering the sample which includes commercial banks operating in Kosovo: Pro Credit Bank, Raiffeisen Bank, Bank for Business, Ljubljanska Nova Banka and Economic Bank. The banking sector in Kosovo has had good growth rate in the past and it is expected that these positive rates will continue in the future.

## 11. Recommendations

- According to the survey results we can conclude that there was no significant difference, including measurement of profitability during the period 2006-2007 compared with the period 2011-2012.
- Such a result may have been due to the fact that Kosovo faced the global financial crisis in a good macro-fiscal position, allowing less sensitive effects.
- We can conclude that Kosovo's banking sector has remained stable despite the appearance of disorder and crisis in the global financial markets during 2006-2007. Regarding capital adequacy and liquidity acceptable level were maintained, were in line with all regulatory requirements.
- Also, it can be said that banks remained stable and protected from the global financial crisis, as they have benefited from the limited exposure to foreign securities.

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**Annexes****Annex 1: Details Student t test:****T Test Results: ROE**

	2006/2007	2011/2012
	Variable 1	Variable 2
Mean	0.04	2.81
Variance	136.04425	280.51425
Observations	5	5
Pearson Correlation	0.683382909	
Hypothesized Mean Difference	0	
Df	4	
t Stat	2.821277081	
P(T<=t) one-tail	0.023883058	
t Critical one-tail	2.131846782	
P(T<=t) two-tail	0.047766116	
t Critical two-tail	2.776445105	

**T Test Results: ROA**

	2006/2007	2011/2012
	Variable 1	Variable 2
Mean	1.12	0.62
Variance	3.747	2.68325
Observations	5	5
Pearson Correlation	0.862393575	
Hypothesized Mean Difference	0	
Df	4	
t Stat	1.14034649	
P(T<=t) one-tail	0.158892593	
t Critical one-tail	2.131846782	
P(T<=t) two-tail	0.317785187	
t Critical two-tail	2.776445105	

## T Test Results: C/I

	2006/2007	2011/2012
	Variable 1	Variable 2
Mean	90.87	93.17
Variance	545.817	280.11825
Observations	5	5
Pearson Correlation	0.840137552	
Hypothesized Mean Difference	0	
Df	4	
t Stat	-0.395704232	
P(T<=t) one-tail	0.356260592	
t Critical one-tail	2.131846782	
P(T<=t) two-tail	0.712521184	
t Critical two-tail	2.776445105	

## Annex 2: Details of the financial Coefficients 2006 -2012

Bank	2006	2007	2008	2009	2010	2011	2012
a) Coefficient ROE (%)							
PCB	31.0	39.2	36.9	34.9	29.2	21.0	19.5
RBKO	24.4	24.9	20.6	8.8	11.1	12.7	12.3
NLB	10.3	10.3	14.3	11.7	12.5	11.4	11.1
BPB	-202.1	50.0	20.8	5.5	6.4	-8.0	-28.3
BE	9.5	2.9	8.5	5.3	-5.4	1.8	-25.4
Mesatarja	-25.4	25.5	20.2	13.2	10.8	7.8	-2.2

Bank	2006	2007	2008	2009	2010	2011	2012
b) Coefficient ROA (%)							
PCB	1.8	3.0	2.9	3.0	2.8	2.3	2.4
RBKO	2.9	3.1	2.5	1.1	1.5	1.8	1.9
NLB	1.3	1.3	1.7	1.3	1.2	1.1	1.1
BPB	-12.7	8.7	3.0	0.6	0.7	-0.7	-1.9
BE	1.2	0.6	1.2	0.7	-0.5	0.1	-1.9
Mesatarja	-1.1	3.3	2.3	1.3	1.1	0.9	0.3

<b>Bank</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
c) Coefficient C/I (%)							
PCB	82.6	73.6	76.4	72.9	74.0	79.4	77.4
RBKO	72.2	72.0	78.0	89.2	83.1	79.9	79.8
NLB	82.3	82.3	82.3	84.9	84.8	85.4	84.9
BPB	210.9	50.7	70.5	93.2	97.6	107.2	119.4
BE	87.4	94.7	85.7	91.3	103.2	98.6	119.7
Banka	107.1	74.7	78.6	86.3	88.5	90.1	96.2

## **The Analysis of the Situation of Foreign Direct Investments in Romania**

**Camelia Milea<sup>1</sup>, Florin Bălășescu<sup>2</sup>**

**Abstract:** Foreign direct investments represent one of the ways of financing any economy. But like any source of financing, foreign direct investments have advantages and disadvantages. This article aims to analyze and present the developments in foreign direct investments in Romania, the fields and areas where they have been made, the structure of these capital flows, as well as the origin of these inflows of foreign direct investments. Also, the author intends to analyze the effects of FDI inflows on the Romanian economy in terms of foreign trade. The conclusions of the article will show to what extent foreign direct investments have contributed positively to the development of the Romanian economy. The research methods used consist in comparative analysis in time, qualitative and quantitative evaluations, interpretations, correlations, as well as in addressing the issue from different perspectives. The analysis shows that in Romania, foreign direct investments have not had many positive effects, having been channeled mainly towards activities with medium processing level and medium technological level and towards speculative services. Another result highlights that the activities of foreign direct investments companies depend to a large extent on imports, so they do not support Romania's economic development.

**Keywords:** foreign direct investments; effects; economy; development; FDI structure

**JEL Classification:** F21; F62

### **1 Introduction**

The starting point of the present research is the definition of foreign direct investments from the 6<sup>th</sup> edition of the IMF Balance of Payments Textbook (the BPM6). According to this document, foreign direct investments (FDI) represent a long-term investment relationship between a resident entity on the one hand and a foreign entity on the other hand. Usually, this relationship implies the exert of a

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significant management influence by the investor in the company in which he has invested.

Foreign direct investments represent one possible method for financing any national economy. But as any other tool of financing it has advantages and disadvantages, both for the national economic agents as well as for the non-resident investors. Thus, non-resident investors want to benefit from lower costs and larger profits, either due to fiscal advantages, or to cheaper labour force or smaller prices paid for intermediary products.

The country receiving FDI inflows considers these funds as one possible way to supplement the internal financing sources of the national economy, which may concur to the formation of capital, to the improvement of the technological level of the endowments, to human resources improvement, to job creation, to the increase of tax income to the government budget, to the increase of international trade flows, to the creation of growth opportunities for local companies, to the transfer of management techniques, of corporate governance practices, of accounting regulations, to the improvement of the quality of goods and services produced in the economy, to the equilibrium of balance of payments.

Romania has benefited from important inflows of foreign direct investments since 1997. Their trend has been upward until 2008 inclusively, in 2009 being recorded a severe diminishment of foreign direct investments inflows.

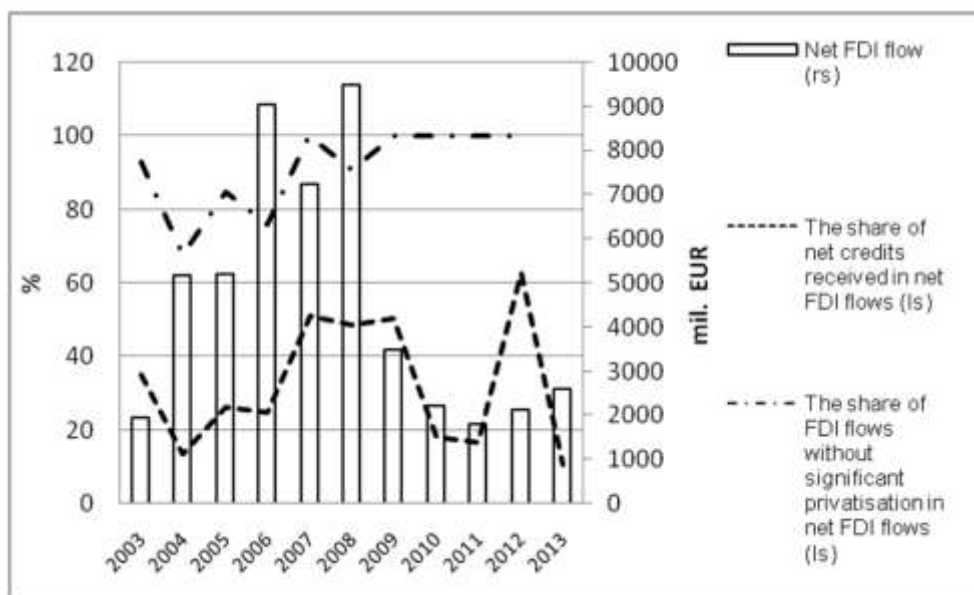
The paper aims at analyzing and presenting the foreign direct investments in Romania during the period 2003-2012, in terms of trend, fields, areas, structure and origin. Also, we intend to analyze the effects of foreign direct investments' inflows on Romania's economy, from the perspective of foreign trade.

## **2. Foreign Direct Investments: Trend, Structure, Fields**

Since 1997, Romania has benefited from important inflows of foreign direct investments, with a significant peak between 2004 and 2008 (see figure 1) (National Bank of Romania [NBR], 2009-2014).

The high level of foreign direct investments inflows in Romania, in the years before the financial crisis, shows a strong investors' confidence in our country. In the new international context created by the financial crisis, beginning with 2009, the situation has changed. Looking for solutions to minimize and to avoid the losses caused by the international financial crisis, the foreign investors have not considered Romania as a favorable location for profitable business between 2009 and 2011. The situation has changed slightly in 2012 and 2013 (NBR, 2014) and we shall see if this trend is sustainable or it is caused by conjectural factors. What has happened during the period 2009-2011 was influenced both by the Romanian

economy, whose privatisable assets have diminished almost to zero, the demand decreased, and the slow economic growth could not attract greenfield investments, and by investors' worries in the context of the international turmoil and risk aversion, by the acute crisis of financial liquidities and the pessimistic perspectives of economic growth of the host countries of foreign of direct investments, by the reduced financial capacity of transnational companies, as a result of credit price rise, by the presence of risk and uncertainty, which diminishes investors' trust, determining them to delay projects (Dinga, et al., 2013).



**Figure 1. The trend and structure of FDI flows in Romania**

*Source: Author's calculations based on NBR data (BPM5)*

From figure 1, we notice that significant privatizations (of more than 10 million euros) have not been the main factor for attracting foreign direct investments capital inflows in our country, most of the years between 2003 and 2012. This development shows a positive aspect, namely that Romania can attract foreign direct investments inflows independent of major privatisable assets whose stock is limited, but there is also a negative aspect, namely that many privatizations have been made for very small capital.

Analyzing the structure of net inflows of nonresidents investments (NBR, 2009-2013), we can see that only in 3 years of the analyzed period the share of net credits received by FDI companies exceeds the share of net participations to the capital of FDI companies in Romania (2007, 2009 and 2012) (see figure 1).

As you know, the net credit represents the credits received by the FDI companies from the foreign direct investor or from the group of nonresident companies to which he belongs, from which there are deducted the credits granted by the FDI companies to the foreign direct investor or to the group of nonresident companies to which he belongs. The net participations represent the capital subscribed and infused, in cash as well as contributions in kind, held by nonresidents in resident companies.

In these circumstances, it is preferable that foreign direct investments inflows should consist mostly of net participations.

From the data analysis, we can say that in Romania the structure of foreign direct investments net flows is in favour of our country, meaning that most of the years of the analyzed period, the capital inflows as foreign direct investments stay in the economy for a longer time, stimulating economic growth. Unfortunately, net credits have a high share precisely in the two years when Romania recorded the highest peak of foreign direct investments inflows, which shows that our country has not benefited from large inflows of stable capitals in 2007 and 2008.

As regards the balance of foreign direct investments at the end of the year, it rises at a high rate between 2004 and 2006, but after that (between 2007 and 2009) the rate drops dramatically. Starting with 2010 it followed a slight revival (NBR, 2009-2014). Based on these developments, it can be concluded that the financial crisis with its effects has not been the main factor which caused the reduction of FDI inflows in Romania, taking into account that the growth rate of foreign direct investments balance decreased since 2007.

In the period analyzed (excluding 2004, 2005 and 2013), the balance of net credits of nonresidents foreign direct investments in Romania has grown at a rate that exceeded even the growth rate of foreign direct investments balance (NBR, 2009-2014). This development is not favorable for Romania's economy, in view of the fact that the funds received in the form of credits must be returned faster than capital participations that remain in the country in the medium and long term and contribute to the growth and development of the economy.

If we compare the evolution of net participations balance with that of net credits balance, we see that, between 2006 and 2012, the net credits balance has increased at a higher rate compared to net participations. This trend is less desirable for any economy, as capital participations represent longer term capital inflows than net credits.

Therefore, from the point of view of the balance, the foreign direct investments structure is not much favorable to our country.



### 3. Foreign Direct Investments Distribution By Main Economic Activities

From the point of view of foreign investors' orientation toward economic branches, in the period 2009-2013, foreign direct investments inflows have been located mainly in the manufacturing industry. Within this industry the best represented branches are oil processing, chemicals, rubber and plastic products; transport means; metallurgy; food, beverages and tobacco; cement, glassware, ceramics, whose weights fluctuate slightly from year to year (see figure 2). (NBR, 2014) It is found a slight increase of the importance of the fields with higher degree of processing, to the detriment of those with lesser degree of processing. However, foreign direct investments inflows have channeled toward areas of activity with medium degree of processing and medium technological level.

Besides industry, other activities that have attracted important foreign direct investments inflows are the financial intermediation and insurance, trade, construction and real estate transactions, information technology and communications. (NBR, 2014)

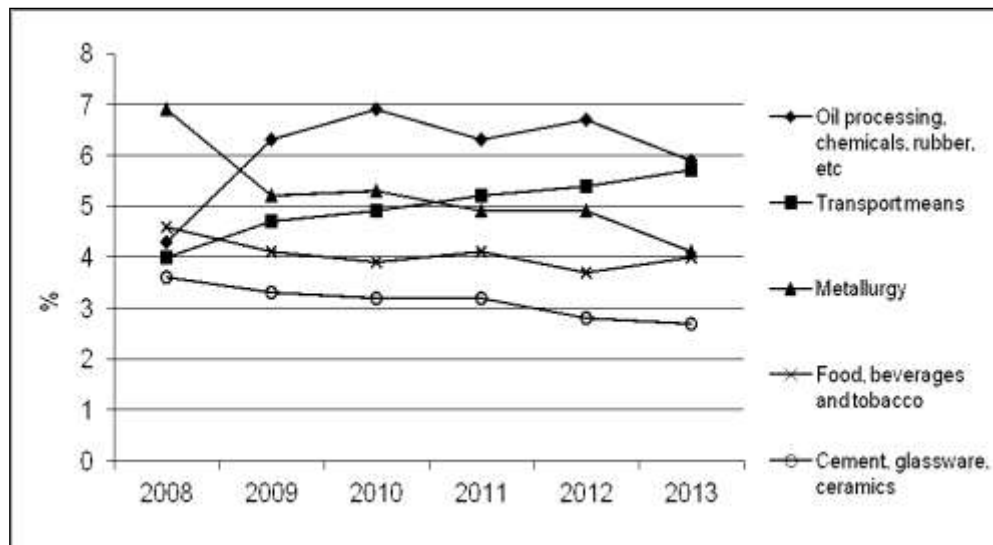


Figure 2. FDI in the manufacturing industry of Romania

Source: Author's calculations based on NBR data (BPM5)

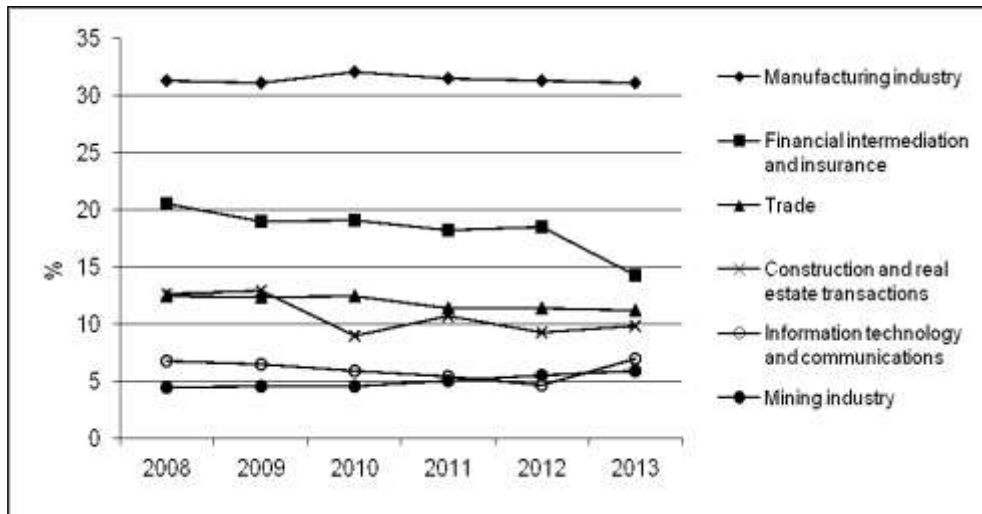
The attractiveness of these services for foreign investors is given by the possibility to obtain fast consistent profits, based on speculative activities. (Mehedintu, 2013).

The general framework of the economy illustrates that both industry and services represent important destinations for foreign direct investments in Romania (see figure 3). Unfortunately, the services that receive capital in the form of foreign

direct investments do not bring high added value for the national economy, and they have speculative character, so they are volatile and vulnerable.

In addition, agriculture (agriculture should represent an area of interest for foreign investors, in view of the fact that Romania’s soil presents a series of benefits, including: low price, the existence of cernozyom (very fertile soil), and no saturation with chemical fertilizer, which provide a potential for organic farming development), transportation, hotels and restaurants (representative for tourism activities, which together with transport infrastructure and agriculture, we believe that there are two of the fields of national interest for Romania) receive only a very low share of the capital inflows in the form of foreign direct investments.

In 2011 and 2012, the losses have exceeded the profits in the fields of financial intermediation and insurance, construction, real estate transactions and in hotels and restaurants. In spite of this situation, in all these areas dividends have been granted amounting to about half of the profits. In 2013, profits have been lower than losses in metallurgy; cement, glassware and ceramics; financial intermediation and insurance; agriculture; construction and real estate transactions; and in hotels and restaurants. We find the same negative situation in the fields of national interest for Romania.



**Figure 3. FDI in the main economic activities of Romania**

*Source: Author’s calculations based on NBR data (BPM5)*

#### **4. Foreign Direct Investments Stock Distribution by Development Regions**

From the geographic point of view, we notice the orientation of foreign direct investments mainly towards Bucharest-Ilfov region (with a weight over 60%), followed by the Center region, the West region, the South-Muntenia region (NBR, 2009-2014). Although foreign direct investments have been located from the territorial point of view after the registered office of foreign direct investments companies, which is not always the same as their business place, this is not the explanation for the major discrepancies existing between the regions. The lack of informational and transport infrastructure may be one of the explanations. In a certain respect a vicious cycle is created. Thus, Romania does not receive foreign direct investments for the development of transport infrastructure, and foreign direct investments inflows do not channel toward the areas where the transport infrastructure is less developed. Unfortunately, this situation is valid for the whole period analyzed, considering the fact that it is noticed only a very slight reduction of the share of the Bucharest-Ilfov region in favour of the other regions.

The development of the West region is explained by the geographic proximity to the Euro Zone, by the development of a European local identity. (Mehedintu, 2013).

We believe that measures should be adopted to fix this problem, by attracting foreign direct investments for the development of the transport infrastructure and for attracting foreign direct investments, especially Greenfield, in other regions except Bucharest-Ilfov in order to diminish the development discrepancies between regions.

#### **5. Foreign Direct Investments Stock Distribution by Country of Origin**

In Romania, the foreign direct investments inflows came from the Netherlands (which holds at the end of 2013, 24,4 % of the FDI stock), followed by Austria (19.1 % ), Germany (11.2 %) and France (7.6 % ). This hierarchy is maintained from 2008 (NBR, 2009-2014).

We notice that these four countries (members of the European Union) have provided more than 60% of the capital inflows in Romania, in the form of foreign direct investments, so there is a concentration of foreign capitals by origin as foreign direct investments inflows in Romania. Also, these figures indicate a large dependency of the Romanian economy on the developments of the European Union countries.

## 6. Exports and Imports of Foreign Direct Investments Enterprises

The activity of foreign direct investments enterprises has a positive impact on Romania's trade balance, these firms' contribution to the exports of goods being over 70 %, while for the imports is over 60% (NBR, 2009-2014) (see table 1). Apparently, the activity of foreign direct investments economic agents has important and positive effects on the Romanian economy. But the high share of imports of these companies shows that their exports consist to a large extent of raw materials and intermediary products from import, which reduces both the positive effects on the current account balance, as well as on the national economy, as a whole.

**Table 1. The contribution of foreign direct investments enterprises to Romania's foreign trade (%)**

Indicators	2008	2009	2010	2011	2012	2013
Contribution to exports	73	69.8	72.4	71.4	70.3	70.9
Contributions to imports	62.6	60.1	62.5	62.6	62.6	64.5

*Source: National Bank of Romania*

Taking into account both the specific fields toward there are channeled foreign direct investments in Romania, as well as the high share of foreign direct investments enterprises in the exports of our country, we understand why Romania exports products of low and medium technological level. Therefore, it is important a national strategy of public policies oriented toward attracting foreign direct investments in the fields with high added value and high technological level, in order to increase Romanian exports competitiveness, and thus to support Romania's sustainable economic development.

Thus, in 2013, the highest share in Romania's exports is held by "machinery, equipment and means of transport" (42.2%), followed by "food products" (12%), "chemicals and plastic products" (11.3%), "metals" (10.3%), "mineral products" (6.2%) and "textiles, clothing and footwear" (5.6%), (NBR, 2013). We can see that intermediary goods, with low and medium technological level dominate our country's exports. However, this situation represents an improvement in comparison with the structure of exports from 2000, when the main group of exported products was "textiles, clothing and footwear" (31.8 % ), followed by "machinery, equipment and means of transport" (18.9%), "metals" (16 % ) (NBR, 2000).

In the structure of imports in 2012, we can see nearly the same hierarchy of groups of products as in the case of exports: "machinery, equipment and means of

transport” (35.8%), followed by “chemicals and plastic products” (18.8%), “mineral products” (11.2%), “metals” (10.7 %) (NBR, 2013). The same situation applies to imports in the years 2000: “machinery, equipment and means of transport” (28.9 %), “textiles, clothing and footwear” (19%), “mineral products” (14.5%), “chemicals and plastic products” (12.7%) (NBR, 2000).

In conclusion, the activity of foreign direct investments companies in our country depends to a large extent on imports and they do not use local suppliers, thus they do not support Romania’s economic development.

Analyzing the structure of imports and exports of foreign direct investments firms, we notice the existence of intra-branch foreign trade.

## 7. The Correlation among Foreign Direct Investments Inflows, Exports and GDP

From figure 4, it may be observed that mainly, in the period 2004-2009 (except 2007) and in 2012-2013, in Romania, there is a correlation between the trend of net inflows of foreign direct investments and exports. In 2010 and 2011, exports grow despite the reduction of foreign direct investments inflows.

The same situation is also noticed in the case of the correlation between GDP and foreign direct investments inflows.

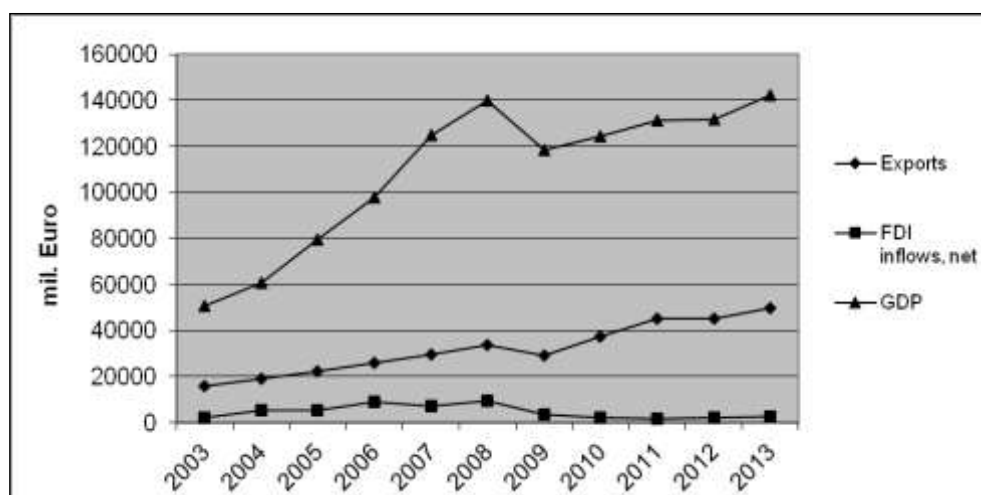


Figure 4. The trend of FDI, exports and GDP in Romania

Source: author’s calculations based on NBR data (BPM5)

## 8. Conclusions

Foreign direct investments represent an important element for the economic development of any country, but the distribution by economic activities of these capital inflows is essential. It is in the national interest of the host country that foreign direct investments inflows to channel toward the areas with high added value and high level of technology.

Although, in the period under consideration, in Romania the structure of net foreign direct investments inflows is favorable to our country, meaning that the share of net participations is higher than the share of net credits, from the balance perspective, the structure of foreign direct investments is not favorable to our country, considering that net credits balance has grown at a higher pace than net participations.

Looking at the general level, in Romania, foreign direct investments inflows have channeled mainly towards industry and services. Unfortunately, the services receiving foreign direct investments in Romania have speculative character, so they are vulnerable and volatile and do not bear high added value for the national economy.

In industry, there is a slight increase in the share of those fields with higher processing level to the detriment of those with lesser degree of processing. However, foreign direct investments inflows have channeled mainly towards activities with medium processing level and medium technological level.

Considering the major regional differences in respect of the destination of foreign direct investments inflows, we consider that steps should be taken in order to correct this problem, by attracting foreign direct investments inflows towards the development of transport infrastructure, as well as by attracting especially Greenfield foreign direct investments in other development regions except Bucharest – Ilfov.

Following the analysis, we notice that the activities of foreign direct investments companies depend to a large extent on imports and these firms do not use local suppliers, so they do not support Romania's economic development. Also, the result of the activity of foreign direct investments enterprises is represented by intra branch trade flows.

Taking into account both the fields towards which foreign direct investments inflows in Romania are directed, and the high share of foreign direct investments companies in Romania's exports, we understand why Romania exports products with a low and medium technological level. Therefore, it is important that government policies should attract and direct foreign direct investments inflows to

industrial branches with high added value and high technological level, with the aim of increasing the competitiveness of Romanian exports, and thus, of supporting the sustainable economic development of our country.

We intend to continue the research, by analyzing foreign direct investments in Romania at regional level, in order to see the differences of attractiveness among the Romanian counties in terms of FDI. Also, we intend to calculate the time necessary to make up for the gaps between the regions with FDI per capita lower than the national average of this indicator and the national average in FDI per capita, and we want to cipher out the dynamics requested to do that.

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**Accounting and Auditing****Currency Crisis Revisited: A Literature Review****Teuta Ismaili Muharremi<sup>1</sup>**

**Abstract:** This paper elaborates on currency crisis, focusing on the main factors causing the currency crisis. After a brief overview of the main factors driving currency crisis, the paper provides a literature review highlighting that the history of the global economy experienced a number of currency crisis whereas as relates to the triggers of the currency crisis there are three generations of models that have been used to explain currency crisis during the last four decades. Underscoring the role of the government in financial market, in particular the evolution of this role as a result of the recent global financial crisis and highlighting other factors that trigger such crisis, the paper concludes that the potential financial crisis can be addressed using early warning system, which consists of indicators proven to be beneficial in anticipation of the currency crisis, and using the advanced empirical models of currency crisis. In this context the paper reveals that currency crisis are associated with all factors impacting them such as inflation, real exchange rate, import growth, US interest rates, public debt/GDP, and current account/GDP – all with a slightly different time lag.

**Keywords:** currency crisis; triggers of the currency crisis; role of the government; financial market; serious financial crisis

**JEL Classification:** G01

**1. Introduction**

The economic theory did not encounter any specific definition of the currency crisis that is acceptable as universal definition. However, when we think about currency crisis the first thing we recall is a massive escape of investors from the currency for which they fear will depreciate thus affecting that this devaluation to really happen at a more financial repressive dimension than usual. In such a situation currency loses its stability and confidence, and if there are no sufficient international reserves then this can result in serious financial crisis.

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## **2. Literature Review**

Global economic history is rich with many currency crisis events starting with debt crises of the Latin American countries during 1980 up to the latter with the debt crisis in the European Union. According to Krugman (2000), the currency crisis has affected emphatically on global economic developments and from this, the need to analyze what motivates currency crises and how should be the response of the government and what are the concrete consequences for the real economy remain as fundamental issues that require further exploration.

Certainly, at the theoretical and practical level, the most provocative question relates to the speculative attacks on the currency. Krugman (1979) had built a simple model according to which foreign exchange rate linked or pegged to another currency should be abandoned if the country's international currency reserves to which the domestic currency is linked are depleted. In fact, this paper of Krugman is based on the principle that the currency crisis are the result of 'weak fundamentals' of and economy respectively expansionary fiscal policies and monetary policies that have resulted in continuous loss of international reserves which it has forced governments to abandon parity rate. However, after this theory of Krugman there are other authors claiming that the authorities may abandon the exchange parity for other reasons too and not necessarily because of the collapse of international reserves. So, governments may be concerned about the negative consequences of the policies needed for maintaining parity (such as high interest rates) or other key economic variables (such as the employment rate).

Regarding the currency crisis triggers, Claessens and Ayhan Kose (2013) give a summary of the main factors. According to them there are three generation of models that are used to explain the currency crisis in last four decades. The authors highlight that the first generation of models dating from the collapse in the price of gold - an important nominal anchor in the wake of flexible exchange rates during 1970s - that has been used in cases of depreciation in Latin America. This generation of models mainly has to do with expectations and investor confidence regarding how central banks are able to provide fixed exchange rate as in many cases the lack of such assurance leads to the collapse of the currency.

The second generation models emphasize the importance of multiple equilibria and mainly relates to doubts that may arise about the willingness of the government to keep the exchange rate fixed, so these doubts can result in multiple equilibria and currency crisis. As summarized by Feridun (2004), in these models the policy is less mechanical, i.e. it is up to the government to decide on defending or not a pegged exchange rate by making a tradeoff between short-run macroeconomic flexibility and longer-term credibility.

The third generation models of currency crisis explore how rapid deterioration of balance sheet coupled with movements in the price of assets including exchange

rate may lead to currency crisis. Main inspiration for these models is found at Asian crises during 1990s, where we observe that large discrepancies in the balance sheet of the financial sector and corporates promote the emergence of currency crises. Thus, the third-generation models are classified into three different groups such as herd-behavior, contagion, and moral hazard. A more detailed elaboration of the currency crisis in Asian countries is also found in the paper of Jeanne (2000) where except the balance sheet discrepancies, uncontrolled capital flows, etc., the author highlights the effect of “putting in one basket” all investors from the region because of the individual countries (for example because of the Thailand then the whole region has been assessed as fragile).

When speaking about the causes and ways of forecasting the currency crisis, Pistelli (2006) in his work challenges the model known as early warning system developed by Kaminsky *et al* (1998) and provides his own distinct model known as aggregate index of the crisis to which he states, that, although with less individual indicators it provides better capacity both in terms of accuracy and in terms of its anticipation, and, above all this index is motivated in economic theory and as such represents a version of unified approach against the currency crisis - an approach that highlights the role of inconsistent macroeconomic policies as an explanation of the currency crisis, i. e. an approach that highlights the role of exchanges between decisions of policy makers as the main cause of the currency crisis.

By analyzing the crisis of 1993 in the European Monetary System, Obstfeld (1994) challenges the validity of the model of Krugman and finds that European economies that have access to the international capital market, for them the adequacy of international reserves is not a concern and it has not the same weight as it was in early 1970, because of new factors such as high interest rates and unemployment are factors that came into play to determine how different governments responded to the crisis in 1992-1993. Obstfeld (1994) further adds that when the government is able to borrow reserves from outside and perform alternative policies in times of crisis, the question arises as to which are the factors that determine the government's decision to abandon or to keep the exchange rate related to another currency.

Kaminsky *et al* (1998) have attempted to build a model called Early Warning System under which the indicators that have proven to benefit in anticipation of the currency crisis include indicators as the performance of international reserves, the real exchange rate, local credit, credit to the public sector and local inflation. Same authors underline the supportive role from other indicators such as trade balance, export performance, increase in money supply, real growth of GDP and the fiscal deficit.

In this context, Babecky *et al* (2012) in their paper which include 40 countries and a time series for the period 1970-2010, along with analysis of the banking crisis

and currency crisis conclude that the launch of the currency crisis was typical preceded by rising rates in the money market and the deterioration of the government balance and the collapse of central bank reserves. Inoue and Rossi (2005) have found that in addition to the traditional leading indicators (multipliers of the money, the terms of trade, etc.), the index of diffusion performs pretty well in real time and with a high probability of providing correct signals on currency crisis. They further conclude that economic variables such as output growth, balance of payments, interest rates and money growth have an impact on forecasting possible future crises. On the other side Pesenti and Tille (2000) conclude that traditional models of currency crisis suggest that weak and unstable economic policies are the main cause of exchange rate instability. Nevertheless, despite the progress with theoretical approach, the empirical models of currency crisis still remain poor in addressing potential financial crises in the future (Fratzscher, 2002).

Using signaling approach and a probit model, Budsayaplakorn *et al* (2010) have analyzed the currency crisis in the case of Southeast Asian countries. Authors concluded that three indicators that are useful in predicting crises include international reserves, stock market indexes and gross domestic product (GDP). Also, these authors point out that while signaling approach gives positive results in providing an effective warning system, modeled Probit approach encounters difficulties with the case of measuring the continuity of individual indicators. On the other hand, they concluded that a significant part of probabilities of crisis cannot be explained by economic fundamentals. This part may be driven by non-economic purposes such as self-fulfillment of expectation or institutional structures. And this is in accordance with Shimpalee and Breuer (2006), which highlighted that bad institutions are associated with contractions of the large-scale production that corruption de facto a fixed exchange rate regime, government's poor stability, poor rule of law and orders increases the probability of currency crises. However the results of these authors shows that reserve imbalances, speculative pressures, and problems in the real sector have contributed considerably to Asian crisis. Though, they also underline that the government policies, macroeconomic environment and investors' panic - all play a role in causing the crisis. At individual country level, Feridun (2004) has built a probit model on Brazilian real crisis of 1999, where using 20 monthly macroeconomic, political, and financial sector indicators he proves the impact of all factors (of course with slightly different time lags) such as inflation, real exchange rate, import growth, US interest rates, public debt/GDP, and current account/GDP., and he concludes that the Brazilian crisis of 1999 was caused by the suspected macroeconomic fundamentals.

On the other side, at the level of individual countries we face heterogeneous findings that prove that there is not a model that can be used to forecast the

currency crisis across all states. The countries' specifics do matter. Thus, in the case of Albania, Mančka (2012) in her work, analyzing the credit risk of the banking system shows that the instability of the national currency in relation to the euro and the US dollar and the global economic and financial have had a significant impact on the credit risks of the Albanian banking credit portfolio.

This credit risk is influenced by the instability of the exchange rate of LEK against Euro where under valuation of the national currency and the euro appreciation has adversely affected the borrowers that have had their loans in euro. As usual, Albanian borrowers have preferred more the alternative of loans in euro because of lower interest rates and confidence in the stability of the euro. As a result of this the possibility for non-payment of loans has increased and consequently the number of problem loans has increased too. In conclusion, the author notes that the Albanian banking system is more exposed to the instability of the national currency against euro and the US dollar because it directly affects the quality of the loan portfolio issued by banks and she suggests that banks should use more policies of balanced crediting, aiming to increase the credit in domestic currency (LEK).

On the other hand, in the case of Turkey, Karabulut, G. *et al* (2010) have attempted to predict the determinants of the currency crisis in Turkey using PROBIT model, which also used the model of Budsayaplakorn *et al* to Asian countries. Their results suggest that short-term debt in relation to GDP, the real exchange rate, the interest rate on deposits, foreign reserves to imports, and the variables loans / deposits as independent variables are all important to explain currency crisis in Turkey. The results show that an appreciation of the domestic currency increases the probability of a crisis. Authors concluded that an effective policy against the currency crisis should be increasing the ratio of international reserves and optimal growth of loans to deposits ratio.

Dietrich, D. *et al* (2011), show that during the great recession in Central and Eastern Europe the banking crisis and currency crisis appeared simultaneously. In this context, authors point out the influence of factors such as subsidiaries of financial institutions, then cross-border financial services, the proportion of foreign currency loans and the type of exchange rate flexible or fixed. Based on these criteria, they demonstrate that the model of the crisis in the Baltic countries differs significantly from the currency crisis in Poland and Czech Republic. So, the Baltic countries were able to successfully defend a fixed exchange regime rate (number of months of the crisis was low), but the loss of confidence (measured in terms of price CDS) was high. At other side, the currencies of Poland and the Czech Republic was heavily devalued (the currency crisis has lasted longer), but the loss of confidence in the ability of these countries to repay public debt was lower. These authors conclude that one reason for the unequal development can be in different structures of the financial systems of these countries.

Alina, C. *et al* (2012) point out that currency crises in emerging markets have been accompanied by banking crises, with a focus on the market for bank credit growth after major devaluation. This study explains how the presence of imperfect competition and bank liabilities against dollar form the real effects of the twin crises. Then the same authors elaborate a model of twin crises under the imperfect competition in the banking and the changes in the market structure that occur after the crisis. Their analysis reveals that the currency devaluations generate harsher twin crises in economies with less competitive banking sectors. These authors point out that crisis are not linked to the non-liquidation of the borrower's foreign loans. Otherwise, the roots of the crisis can be traced through two other defects, the imperfect competition in the banking industry and the currency mismatch in the own bank balances. With this goal in mind, the authors build a DSGE model for the introduction of currency mismatches whose results shows that devaluations of the currency are an outcome of deeper crisis in the economy where producers rely more on bank loans. Findings reveal that devaluations of the currency generate the most serious twin crisis in the economies with less competitive banking sectors. Having found that, authors emphasize the need for regulation that explicitly focuses on market structure of the banking sector. Indeed, policymakers can promote capital markets thus lower producers' dependence on bank loans. Finally the authors conclude that their model can be used to analyze the role of the effects of devaluations on regulations when imposing banks to restrictions on their foreign exchange positions.

Furceri *et al* (2012) empirically examines the relationship between capital flows and the probability of banking, currency and balance of payments crises in the future. Using the data on developed economies and developing countries (1970-2007), the authors find that large capital inflows increase the possibility for banking crisis with a probability of occurrence within 4-5%. The results mean a doubling of the probability in the near future. As might be expected, the effect is greater for sudden stops where the probability of occurrence of a sudden stop growing by 22% in the two years following the end of an event to the large influx of capital. Authors in particular conclude that large inflows in capital which are debt capital, stimulate significantly the increase in the probability of banking crises, currency and balance of payments, while capital inflows from portfolio investments or foreign direct investment have negligible effect. According to them, other factors that affect the appearance of these crises are inflation, short-term interest rates, and foreign reserves, banking concentration, trade openness, net foreign assets and foreign debt.

Bruinshoofd. A, *et al* (2010) assess whether the role of trade, financial links and banking sector fragilities help explain the transmission of the currency crisis. From their findings it appears that while the role of trade and financial ties is strong in time, the independent role of the fragility of the banking sector is very weak and

unstable in crisis events. The authors point out that the characterization of the fragility of the banking sector by common factor analysis leads to results that measurement is not conclusive. So the measurement of fragility of the banking sector in the macroeconomic level cannot be accurate, and they call for the use of micro data, especially the NPLs (non-performing loans) and market estimates based on bank fragility. The authors then investigate the role of the fragility of banking sector in the transmission of crises to see if this fragility can apply to events (episodes) of the crises in the future. At the end, they point out that it is difficult to draw the observed banking fragility, the channels of transmission from one crisis to another and therefore they conclude that during future crises events the economies characterized by fragility of the banking sector are more prone to transmission of crises.

As relates to the response of the governments of different countries regarding the currency crisis, it is worth mentioned frequent analysis being done to the phenomenon known as "the currency war". Hence, Darvas and Pisani-Ferry (2010) analyzing from an European perspective the possible threat posed by the 'currency war' claim that 'currency war' is manifested through inflexible fixing of undervalued currencies, then through the efforts of countries with fluctuation regime of exchange rates to resist currency appreciation and by quantitative easing which mainly performed by Fed, the Bank of England and that of Japan. When it comes to the Eurozone, the same authors suggest that Europe remains primarily concerned with the issue of inflexible fixing of undervalued currencies, a concern that also relates to the recommenced debate on the international monetary system.

Regarding the repercussions of the currency crisis, Hale and Arteta (2007) analyzing the data at the level of enterprises they analyze the effect of the crisis of foreign currency credit to the private sector in emerging markets. The authors find that foreign credit to the private sector falls by 25 percent in the first year after the currency crisis and that this reduction is particularly continuous, substantial and high in the first five months after the currency crisis. The authors also report that both as the demand as well as the supply of credit get a substantial hit after the currency crisis and thesis consistent with the view that the currency crisis leads into balance sheet effects which result in reduction of credit and because the balance sheet difficulties take time to resolve then the reduction of credit supply is continuous.

### 3. Conclusion

The reviewed literature shows that there is no ‘one - size fits all’ model to explain currency crisis as their intensity depends a lot on countries’ individual specifics. However, most of the empirical evidence show that the same set of factors (inflation, real exchange rate, import growth, US interest rates, public debt/GDP, and current account/GDP) are found to impact every currency crisis so far.

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## **The Effect of SAK ETAP Implementation to the Use of Accounting Information at SMEs in Banyumas Region, Central Java, Indonesia**

**Negina Kencono Putri<sup>1</sup>, Atiek Sri Purwati<sup>2</sup>, Irianing Suparlinah<sup>3</sup>**

**Abstract:** The aim of this study is to analyze the implementation of SAK ETAP and its influence on the use of accounting information on SMEs, especially in Banyumas region, Central Java, Indonesia. A survey method using questionnaires to 82 SMEs scattered in the Banyumas region used in this study. The independent variable in this study is the application of SAK ETAP for SMEs, and the use of accounting information as the dependent variable. Data analyzed using OLS. The results showed that there was positive effect between SAK ETAP implementation on the use of accounting information to SMEs in the Banyumas region. The preparation of financial statements in accordance with accounting standards will produce a valuable report, and it will improve the performance of SMEs. The study was limited to done in the district of Banyumas, Central Java, where most of the businesses included in the micro and small categories. Future research should be able to analyze other variables that may affect the use of accounting information, such as the assessment of external parties and can be done within the scope of the broader research area. The results of this research are valuable because the use of accounting information will lead the more appropriate business decisions and useful for SMEs business development.

**Keywords:** small and medium enterprises; SAK ETAP; accounting information; performance.

**JEL Classification:** M20; M41

### **1. Introduction**

Accounting becomes important in a company, whether small-scale or large-scale enterprises. Companies that conduct financial records will be able to set up operations properly. Company owners who take records of financial discipline can

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also take a more precise business decisions by using financial statements as a source of reliable information (Klapper, 2006; Fishman and Love, 2003).

The Indonesian Financial Accounting Standards Board (DSAK) in 2009 has adopted the Accounting Standards for Entities without Public Accountability (SAK ETAP). SAK ETAP is effective as of 1 January 2011. The use of SAK ETAP is intended for entities without public accountability of the entities that do not have significant public accountability, and entities that publish general purpose financial statements for external users.

This standard is packed quite compact when compared with Financial Accounting Standards (GAAP). The presence of this standard can be a reference that is easier for a wider audience for the preparation of financial statements which can be generally accepted. Therefore, this study aimed to examine the influence of implementation of SAK ETAP to the level of use of accounting information on SMEs, especially in Banyumas, Central Java, Indonesia.

## 2. Literature Review

### *Micro, Small and Medium Enterprises (SMEs) and Accounting*

Lucky and Olusegun (2012) states that entrepreneurship is different from SMEs. Entrepreneurship is a process for creating SMEs and businesses, while SMEs only represents a business or businesses in small and medium sizes. Meanwhile, the Central Bureau of Statistics (BPS) Republic of Indonesia defines micro enterprises as business entities which have a workforce of less than 5 people, including family members who are not paid; small business as a business entity which has a workforce of 5 to 19 people with sales of no more than 1 billion per year; and medium-sized businesses as a business entity which has a workforce of 20 to 99 people and has a wealth of not more than 500 million excluding land and buildings.

American Accounting Association (AAA) defines accounting as the process of identifying, measuring, and reporting economic information to allow for assessment and decision clearly and expressly for those who use the information. According to the American Institute of Certified Public Accounting (AICPA) Accounting as the art of recording, classifying, and summarizing a particular way in the monetary size, transactions and events are generally of a financial nature, including interpreting the results. Accounting is also an information system that measures business activity, process the data into reports, and communicating the results to decision makers.

### *Accounting Standards*

Accounting standards are concepts, principles, methods, techniques, and others were deliberately chosen on the basis of conceptual framework by the agency

standard setters or authorized to applied in an environment or state and put in the form of official documents in order to achieve the objectives of financial reporting countries. Accounting standards intended to ensure that the quality is high comparability between enterprises. Meanwhile, accounting standards also provide flexibility (discretion) for enterprises to choose the most appropriate accounting treatment with the condition of business entities.

There are several reasons why the accounting standards were made. First, the standards provide information about the financial position, performance, and implementation of a company to the users of accounting information. This information is considered to be clear, consistent, reliable, and comparable. Second, provide guidelines and standards for public accounting measures that allow them to apply prudence and freedom in selling their expertise and integrity of the audit reports and the company proves the validity of these reports. Third, the standards provide a database to the government on a range of variables that are considered very important in the implementation of taxation, regulation of enterprise, planning and economic regulation, as well as increased efficiency and other social goals. And fourth, standards foster interest in the principles and theories for those who have a concern in the disciplines of accounting (Ramanna & Sletten, 2009).

#### *The Implementation of Financial Accounting Standards Entities without Public Accountability*

Financial Accounting Standards for Entities without Public Accountability (SAK ETAP) is intended to be used entities without public accountability. Entities without public accountability is an entity that does not have significant public accountability; and publish general purpose financial statements (general purpose financial statements) for external users. Examples of external users is the owner who is not directly involved in managing the business, creditors, and credit rating agencies.



**Figure 1. Research Framework**

Meanwhile, the application referred to in this study was the work of SAK ETAP practice in the preparation of financial statements, starting from the balance sheet, income statement, cash flow statement, statement of changes in equity, and notes to

the financial statements.

#### *Accounting Information*

Accounting information is defined as information statutori, budget information, and additional information resulting from the accounting process and used as the basis in making decisions. Statutori information consists of a balance sheet, income statement, statement of changes in equity and cash flow statement. Budget information consists of information about the budget of income and cash flow budgets. Additional information consists of information report the cost of production and financial ratios. The use of accounting information is defined as the use of data accounting information by internal and external parties for the company's strategic planning, management control, operational control and decision making (Son & Marriott, 2006; Amoako et al., 2014).

#### *Hypothesis Development*

The main problems are the focus in the development of small and medium micro enterprises is about financial management. There are some, in a little number, of SMEs which do not keep records of financial transactions and preparing financial statements correctly. They are constrained by the lack of understanding and knowledge of SAK ETAP.

Financial Accounting Standards Entities without Public Accountability (SAK ETAP) issued by the Indonesian Institute of Accountants (IAI) was unfamiliar to the some of SMEs, so that the application of SAK ETAP is also inadequate. Research about the quality of the financial statements and the prospect of SAK ETAP implementation proves that prospects for the implementation of ETAP to the improvement of the quality of GAAP financial statements of SMEs may not yet be achieved optimally. Similarly, the study Kristanto (2011) preparation of financial statements in accordance with GAAP SMEs ETAP yet.

Accounting information resulting from transaction records and financial statements are useful as consideration in business decision making. The use of accounting information that not optimal yet will led the unappropriated business decision-making and it will have an impact on business continuity.

Thus, the hypothesis in this study:

***The implementation of SAK ETAP will affect the use of accounting information on SMEs in Banyumas, Central Java, Indonesia.***

### 3. Research Method

#### *Type and Research Object*

The type of this study is survey research, conducted to obtain facts about the symptoms of the problems that arise. Object under study in this research is knowledge ETAP SAK, SAK ETAP implementation and use of accounting information on SMEs in Banyumas, Central Java, Indonesia.

#### *Population and Sample*

The population in this study are all Micro, Small and Medium Enterprises (SMEs) in Banyumas Region, Central Java, Indonesia. Sampling was done by saturated sample, the sampling technique when all members of the population used as a sample. Sampled SMEs are SMEs that have made financial statements.

#### *Data Collection and Processing*

The data used in this study are primary data. Primary data refers to information obtained first hand by researchers associated with the variable interest for the specific purpose of the study. Methods of data collection was conducted through questionnaires. The questionnaire is a list of written questions that have been formulated in advance to be the respondent replied, usually in a clearly defined alternative. The questionnaire used in this study was a questionnaire enclosed so that respondents just choose the option deemed most appropriate answer.

The data is then processed using OLS analysis having previously tested the validity and reliability by using product moment correlation technique and Cronbach's Alpha. OLS model used in this study are:

$$\text{The use of accounting information} = \alpha + \beta_{\text{Implementation of SAK ETAP}} + \varepsilon$$

Implementation of SAK ETAP as an independent variable in this study was the work of SAK ETAP practice in the preparation of financial statements, starting from the balance sheet, income statement, cash flow statement, statement of changes in equity, and notes to the financial statements. This variable was measured with a modified questions that was adopted from the instrument developed by Dewi (2012). Respondents' perceptions of these variables were measured using a Likert scale of 1 to 5.

The dependent variable in this study is the use of accounting information in the form of data usage accounting information by the parties to the internal and external companies for strategic planning, management control, operational control and decision making. Perceptions of respondents to variable usage accounting information is measured using a Likert scale of 1 to 5.

#### 4. Research Result

##### *Respondents Overview*

Micro, Small and Medium Enterprises (SMEs) in Banyumas, Central Java sampled in this study is a company engaged in trading and manufacturing, some 82 companies. The data used in this research is primary data obtained through questionnaires. Respondents in this study is a manager or employee who served as the company's financial record-keeping force.

##### *Data analysis*

Testing instruments covering research validity and reliability of data. Test the validity of the data is intended to express the extent to which the data are collected in the questionnaire will measure what to measure. In this study the validity of the data examined by comparing the value of  $r_{count}$  from Pearson correlation with  $r_{table}$ , with a level of significance of 95% or  $\alpha = 0.05$ . If the value of the  $r_{count}$  is greater than  $r_{table}$ , it can be concluded that the research instrument is valid.

Once all the items the question is valid, then the next question item was tested reliability. Reliability is used to show consistency when the instrument is tested back. To test the reliability of the data is done by comparing the value of Cronbach's Alpha with  $r_{table}$ . If the value of Cronbach's Alpha greater than the  $r_{table}$ , it can be concluded that the research instrument is reliable. From the validity of the test results, all data has a  $r_{count}$  value greater than  $r_{table}$  (0.265) so that it can be concluded that the research instrument are valid. Meanwhile, the reliability calculation results show that the value of Cronbach's Alpha for each variable is greater than  $r_{table}$  (0.334), and can be concluded that the items instruments for each variable is reliable.

##### *Discussion*

The hypothesis that the application of SAK ETAP affect the use of accounting information on SMEs in Banyumas, Central Java, Indonesia tested using OLS analysis. OLS models produced are:

$$\text{The use of accounting information} = 3,245 + 0,067 \text{Implementation of SAK ETAP} + \epsilon$$

SAK implementation of ETAP to the SMEs in Banyumas successfully supported by the data affect the use of accounting information. T values obtained amounted to 0.067 and a positive value, so it can be concluded that the variable application of the SAK ETAP positive effect on the use of accounting information. In addition, the results of statistical tests also indicated that the value of significance for the implementation of ETAP SAK worth 0.047. This means that the value obtained is smaller than the significance level of 0.05. In other words, the application of SAK ETAP on SMEs in Banyumas significantly affect the use of accounting information.

**Tabel 1. Summary of Statistics Testing Result**

F <sub>test</sub>	0,234
T <sub>test</sub>	0,067
Sig.	0,047
Cronbach Alpha for reliability test	0,334
Pearson Correlation for validity test	All more than 0,265

The results are consistent with the results of the study Rebecca and Benjamin (2009); Son and Marriott (2006); and Wahdini and Suhairi (2006) who found that the preparation of financial statements in accordance with accounting standards will produce a report which has the added value the better. The increased added value will ultimately increase the use of accounting information and the performance of the SMEs concerned.

## 5. Conclusion

This study aimed to analyze about the implementation of SAK ETAP and its influence on the level of use of accounting information on SMEs, especially in Banyumas region, Central Java, Indonesia. The study use a survey method questionnaires to 82 SMEs are scattered in the district of Banyumas, Central Java, Indonesia. The independent variables in this study consisted of the application of SAK ETAP for SMEs, and the dependent variable is the level of use of accounting information as the dependent variable. Data analysis was done using OLS.

The results show that there is a positive influence between SAK ETAP implementation on the level of use of accounting information to SMEs in the region Banyumas, Indonesia. Results also showed that the use of accounting information can help improve the performance of SMEs. This study was limited to being done in the district of Banyumas, Central Java, where most of the businesses included in the micro and small categories. In addition, the variables used in this study is also just a variable application and knowledge SAK ETAP only. Future studies will be able to analyze other variables that may affect the use of accounting information, such as the assessment of external parties and can be done within the scope of the broader study area.

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# **Economic Development, Technological Change, and Growth**

## **Bivariate Cointegration Analysis of Energy-Economy Interactions in Iran**

**Ismail Oladimeji Soile<sup>1</sup>**

**Abstract:** Fixing the prices of energy products below their opportunity cost for welfare and redistribution purposes is common with governments of many oil producing developing countries. This has often resulted in huge energy consumption in developing countries and the question that emerge is whether this increased energy consumption results in higher economic activities. Available statistics show that Iran's economy growth shrunk for the first time in two decades from 2011 amidst the introduction of pricing reform in 2010 and 2014 suggesting a relationship between energy use and economic growth. Accordingly, the study examined the causality and the likelihood of a long term relationship between energy and economic growth in Iran. Unlike previous studies which have focused on the effects and effectiveness of the reform, the paper investigates the rationale for the reform. The study applied a bivariate cointegration time series econometric approach. The results reveals a one-way causality running from economic growth to energy with no feedback with evidence of long run connection. The implication of this is that energy conservation policy is not inimical to economic growth. This evidence lend further support for the ongoing subsidy reforms in Iran as a measure to check excessive and inefficient use of energy.

**Keywords:** energy consumption; economic growth; granger causality; VAR; Iran

**JEL Classification:** C22; O40; Q43; Q48

### **1. Introduction**

The energy sector is until recently, often considered a minor fragment in nearly all countries but the impact energy on the overall performance of an economy is very vital. This is particularly so in many oil rich developing economies where the production and export earnings from the development of energy products has remain the main source of financing major economic and social development. Two important but interconnected factors will among others fairly describe the present economic feat of any MENA<sup>2</sup> countries like Iran in the present day. These are oil price fluctuations and foreign sanctions which regrettably, are determined outside

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<sup>2</sup> MENA is common acronyms for the countries in the Middle East and North African known to be a region with large oil reserves.

the system. Therefore, as oil trades and revenue remained the mainstay of government's economic activities, huge and sporadic shocks arising from the international energy markets will remain a dominant exogenous factor in Iran's fiscal operation in particular and the growth of the economy at large. This highlights the point that oil trade and pricing has greatly shaped the path of economic growth of Iran's in the last forty years – a development that may not end shortly.

The various shocks in the international oil market and the attendant crisis from the 1970s has continued to draw nation's attention to the prominence of energy as an essential factor of production. Subsequently, there has been several empirical evidence attesting to the significance of energy as production input sidewise capital and labour (e.g. IEA, 2004). Economic theory suggests that the rate at which a country uses energy resources mainly depends on both the economic structure and the share of each sector in the production activities along the stages of development country's economy. Accordingly, while the highly mechanised industrial economies are likely to consume more energy, mostly agricultural and service based economies will use less energy inputs in relative terms. (Soile, 2012).

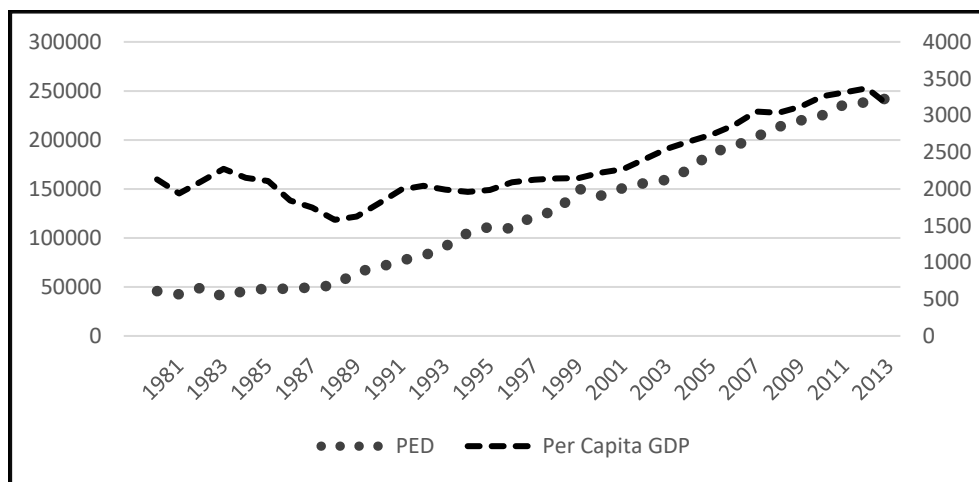
The academics have shown great and keen interest in both the dictates of economic theory and the empirical link between economic growth and energy use. However, the more the energy-economy causality studies, the varied the conclusions depending to a large extent on the method used. Yet, the inferences drawn on the outcomes of these studies has great consequences for policy formulation. To this end, the paper seeks to explore two connected but separate objectives which are to establish the direction of causality (if it exists) between energy usage and economic activities in Iran and examine their long run connection in a co-integration analysis

Iran is an ideal preference for this type of investigation for a few peculiarities. First, Iran's energy prices are highly subsidised until the end of 2010 when the government commenced the initial phase of a major subsidy reform by raising energy prices to promote efficient use. According to the Iran Oil and Gas Monthly Report of April 30, 2014, the second phase of the subsidy reform intended to further manage domestic consumption was implemented in April 2014. Unfortunately, Iran's economy growth which averaged 8% in the 2001-2010 decade shrunk for the first time in two decades from 2011 and grew only marginally in 2014. This suggests a relationship between energy use and economic growth that deserve to be investigated.

Second, Iran has experienced numerous domestic political conflicts as well as a disconnected foreign relations for many years with consequent adversities on the country's energy consumption pattern in specific and the nation's socio-political and economic progress in general. A prominent member of the Organisation of Petroleum Exporting Countries (OPEC), Iran's proven natural gas reserves

positions her among the top two in the world. Yet, the natural gas sector barely satisfy only domestic consumption which is about 54% of the country's total energy consumption. Even as the second largest producer of crude oil in OPEC with a daily production of about 3.7mmbbl<sup>1</sup>, Iran still imports a considerably proportion of its gasoline consumption due to limited refinery capacity (EIA, 2012). Iran's demand for primary energy and per capita output in real terms grew at an average rate of 5.5% and 1.3% respectively between 1980 and 2013 (see table 1 below). There is no doubt that these trend deserve an assessment to unravel the possible link between this growth in energy demand and the growth of Iran's economy.

Third, carefully investigated and corroborated results on the nature of causality and the long run association between energy consumption and economic performance can serve the dual purpose of practical policy guidance and overall macroeconomic management. For instance, policy makers in Iran like other typical net oil exporting nations engage in setting end use prices for both domestic and industrial energy consumers below their opportunity costs – an action that often results into higher domestic consumption and gross inefficiency in the use of energy. This is a policy that is only rational if and only if a causality that runs from energy consumption to economic growth without feedback is established.



**Figure 1. Primary Energy and Real per capita GDP of Iran (1980-2013)**

*Source: Computed by the author from IEA energy balance data, 2015*

<sup>1</sup> See Energy Information Administration (EIA, 2012) Country Analysis Brief.

## 2. Literature Review<sup>1</sup>

The literature on energy-economy link is very rich with two general classification. The first categories are studies that investigate individual countries (country specific) and the other class which study set of countries with defined peculiarities (group specific). While country specific studies can give broad information about a country energy-economy link, the group specific studies can tell if economies with similar features behave similarly. For instance, Soytaş and Sari (2003) study the energy-economy interactions in two economically distinct groups – the best 10 emerging and the G7 nations. The outcome shows that while energy conservation may be use to arrest excessive demand in Italy and Korea, such a policy will be inimical to growth in France, Turkey, Japan, and Germany. Their results show that growth and energy granger cause each other only in Argentina. Interestingly, a similar group study by Lee in (2006) comprising 11 industrial economies reported an opposite results on the energy-economy relationship for Japan and France.

This is one of the very many evidences in the literature to corroborate our earlier assertion that different studies can obtain different results for the same country depending on methods, data and time. Perhaps, evidence of bi-directional causality between energy consumption and growth was found by Paul and Bhattacharya (2004) with the application of the Johansen multivariate cointegration technique alongside the standard granger causality test using Indian time series data between 1950 and 1996. Using a different data sets and decomposing energy into coal, oil and electricity, Mallick (2009) finds that while the quest for higher growth is stimulating higher consumption of both oil and electricity, coal usage is the only energy that fuels growth in India. Still on India, Wolde-Rufael (2010) explores further decomposition of the energy to include nuclear consumption and reassesses the energy-economy interaction with a bound-test cointegration method. Though, labour and capital are accounted for in the model, the results confirm that nuclear energy also stimulates economic growth in India.

Considerable efforts have also been made to examine the short and the long term energy-economy interactions in developing countries. Using enhanced test of series stationarity, error-correction and cointegration techniques, Lee, (2005) finds evidence supporting a one-way causality running from energy to growth with no feedback for a panel of 18 countries. The results appear plausible given that more energy may be consumed as these economies develops suggesting that efficiency in use will be a better policy for demand management as against conservation policy. A similar investigation conducted on a panel of 11 net oil exporting countries by Mehrara, (2007) suggests that these countries could implement pricing reforms in their energy sector to enhance conservation without impairing economic growth. Wolde-Rufael, (2009) studies energy-economy interaction in a panel of 17 African

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<sup>1</sup> This section benefits extensively from an earlier work by the author.

countries with labour and capital included as variables in a multivariate system. While the causality results rejects the proposition of neutral energy-economy relationship in 15 countries, the outcome of the variance decomposition are generally too weak for any cogent conclusions.

Similarly, the implicit assumption of panels' homogeneity by existing energy-growth nexus was challenged by Akkemik and Goksal, (2012) by investigating the causal relationship between energy consumption and GDP for a large panel of 79 countries with data for the period of 1980 to 2007. After due account for panel heterogeneity, the results of the heterogeneous causality and non-causality as well as the homogeneous causality and non-causality revealed that only about 10% of the countries studied exhibit a one-way granger causality while about 20% and 70% exhibit no Granger causality and bi-directional granger causality respectively.

Kahsai et al. (2010) tested the empirical causal relationship between energy consumption and economic growth in a panel of low and middle income Sub-Saharan African countries using a panel unit root test and co-integration method. The results support the neutrality hypothesis in the short-run for low income countries and a strong bi-directional causality between energy consumption and growth in the long-run. The study attributed the dissimilar results for low and middle income countries to the role of income level in energy-growth causality and concluded that Sub-Saharan African countries should formulate sustainable development policies to enhance efficient allocation of resources in order to increase energy access in the region. The results of the empirical study by Menegaki, (2011) which used a random effect model within a multivariate panel framework to investigate the renewable energy and growth causality in 27 European countries. The results reported no evidence of causality between GDP and renewable energy consumption. Though the panel causality tests revealed that renewable energy, greenhouse gas emissions and employment are related in the short term, the co-integration estimates indicated at best, the neutrality hypothesis on the relationship between economic growth and renewable energy consumption in Europe.

Mahmoodi and Mahmoodi. (2011) employed the ARDL bound test and the Toda-Yamamoto modified Granger causality test to examine the causal and the long-run relationship between renewable energy consumption and economic growth for seven developing countries in Asia. The findings provide evidence of one-way causality running from economic growth to renewable energy consumption in Iran, Pakistan, India and Syria; a bi-directional causality between renewable energy consumption and economic growth in Jordan and Bangladesh; and no causality for Sri Lanka. Shahbaz et al. (2012) examined the relationship between both the renewable and non-renewable energy consumption and economic growth in case of Pakistan. The results of the ARDL bounds tests and the structural break co-integration and unit root tests indicated that both types of energy consumption,

growth, labour, and capital are co-integrated in the country while the VECM Granger causality tests reveal a feedback hypothesis for each of renewable energy, non-renewable energy consumption and capital with economic growth

**3. Methodology**

Generally, a single model cannot practically serve the diverse purpose of modelling energy consumption and economy growth interactions as there are quite numerous considerations arising because of the pervasive role of energy in practically all economic activities. This according to Soile (2012) suggests that “a perfect model” if such exist, would among other things provide for a disaggregation of production sectors; allow for endogenous factor substitutions; comprise various consumers and factor endowments; and account for agents’ consumption behaviour. Therefore, the model adopted in previous literature depends on the researcher’s specific interest in relation to the kind of desired interaction about energy and the economy.

Given the aim of this paper which is to ascertain the causal relationship between variables and investigate the stability properties of the data as a requirement for cointegration and error correct analyses, the models described below are purposely targeted at reaching empirical conclusions regarding this objective. In all the following equations, lower case Latin or Greek letters represents fixed parameters; upper case letters represent endogenous and exogenous variables while the subscripts t and i merely stand for time period.

**3.1. The Granger Test**

The study employed the test suggested by Granger (1969) which presumed that the facts relevant to the prediction of any variable in the model are contained solely in the time series properties of these variables. The test is conducted by estimating the regression equations 1 and 2 below:

$$EG_t = \sum_{i=1}^n \alpha_i EC_{t-i} + \sum_{j=1}^n \beta_j EG_{t-j} + u_{1t} \dots \dots \dots 1$$

$$EC_t = \sum_{i=1}^n \lambda_i EC_{t-i} + \sum_{j=1}^n \delta_j EG_{t-j} + u_{2t} \dots \dots \dots 2$$

By assumption, the disturbances  $U_{1t}$  and  $U_{2t}$  are uncorrelated. The first equation above postulates that the current real gross domestic product  $EG$  relates to past values of  $EG$  itself as well as energy consumption  $EC_t$  while the second equation postulates the same for  $EC$

- If in equation 1, the estimated coefficients on the lagged  $EC_t$  are statistically significant as a group (i.e.  $\sum \alpha_i \neq 0$ ) and the set of estimated coefficients on the lagged  $EG_t$  in equation 2 are statistically insignificant (i.e.  $\sum \delta_i = 0$ ), this indicates *Unidirectional* causality running from EC to EG without feedback.
- There is *Unidirectional* causality running from EG to EC without feedback if the set of the lagged  $EC_t$  coefficients in equation 1 are not statistically significant as a group (i.e.  $\sum \alpha_i = 0$ ) and the test of the lagged  $EG_t$  coefficients in equation 2 are statistically significant (i.e.  $\sum \delta_i \neq 0$ ).
- where the sets of  $EG_t$  and  $EC_t$  coefficients in both equations are statistically significant, we have a case of *Bilateral* causality implying that both variables granger cause each other
- Finally, the two variables are Independent of each other when the sets of  $EG_t$  and  $EC_t$  coefficients in both equation are statistically insignificant.

### 3.2 The Vector Autoregressive (VAR) Model

The Vector Autoregressive (VAR) is a theoretic, non-structural model that makes minimal theoretical demands on the structure of the model. The model is *auto – regressive* because the lagged value of the dependent variable usually appears on the right-hand side of the equations while the term ‘vector’ stems from the fact that it deals with a vector of two (or more) variables. The model is expressed in equations 3 and 4 as follows:

$$EG_t = \alpha + \sum_{j=1}^k \beta_j EC_{t-j} + \sum_{j=1}^n \gamma_j EG_{t-j} + u_{1t} \dots \dots \dots 3$$

$$EC_t = \alpha' + \sum_{j=1}^k \theta_j EC_{t-j} + \sum_{j=1}^n \delta_j EG_{t-j} + u_{2t} \dots \dots \dots 4$$

Where k and n are the highest number of lags required to capture most of the effect that the variables have on each other. In this study, the Akaike Information Criterion (AIC) is used to choose the optimal lag length. Therefore, each equation of the model will have the same number of lags usually refers to as the optimal lag for the two equations. With this, each equation is imposed a linear constraint and therefore can be estimated using the Least Square (OLS) method.

**3.3 Tests for Stationarity**

Since most time series always indicate the presence of a stochastic trend, we apply the Augmented Dickey-Fuller tests to check if the variables in equation 3 and 4 above may be integrated, the study uses (Dickey and Fuller, 1979; 1981) to test the null hypothesis that the series is stationary or not. The relevant equations for the augmented Dickey Fuller tests are as follows (note that  $u$  is white noise)

$$\Delta EG_t = \alpha + \delta t + \phi^* EG_{t-1} + \sum_{i=1}^{p-1} \phi_i \Delta EG_{t-i} + u \dots \dots \dots .5$$

$$\Delta EC_t = \alpha + \delta t + \phi^* EC_{t-1} + \sum_{i=1}^{p-1} \phi_i \Delta EC_{t-i} + u \dots \dots \dots .6$$

**3.4. Co-integration Analysis**

In order to establish the number of co-integrating equations within the equations of the VAR above, the study agree to the unrestricted co-integrating rank test. Also while it is possible to correct random walk in variables by mere differencing of these variables, the study opted to estimate the VAR equation by applying some co-integrating restrictions because in some cases, a linear combination of two variables that follow random walk can be stationary. By this we avoid loss of essential long run information that normally characterised the former approach.

**3.5. The Error Correction Mechanism (ECM)**

The error correct mechanism captures the entire dynamics of variables in the ECM equation below in the short run and it is applicable where the variables are co-integrated but the co-integrating regressions have stationary residuals. By definition,  $\delta_{t-1}$  is the proxy for the disequilibria which tells the path to equilibrium in the long run.

$$\Delta RG_t = \alpha + \sum_{i=1}^k \gamma_i EG_{t-i} + \sum_{j=0}^m \lambda_j \Delta EC_{t-j} + \delta ECM_{t-1} + u \dots \dots \dots .7$$

So if the error correction term ( $\delta$ ) is significant, it shows the fraction of the disequilibria in economic growth (RG) in period (t) corrected in the period (t+1). Therefore, the study specifies an over-parameterised ECM model within the context of general to specific in order not to confine the dynamics of our model.



## 4. Results and Analysis

### 4.1. The Data sets

The study uses time series data on two variables namely, economic growth in real terms proxies by (gross domestic product in constant 2000 US\$) and the total final consumption in (thousand tons of oil equivalents). These data were sourced from IEA, (2015) covering the period of 1971 to 2013. The choice of real gross domestic product (EG) is partly due to the clearest picture of economic activities in an economy and partly because it is adjusted for inflation which better approximates the true variation(s) in national output across the relevant period. The study uses final energy consumed as against primary energy employed by other studies advantage its vital plus. Unlike primary energy which may overstate actual consumption, final consumption captures what is truly accessible to the various sectors of the economy to consume excluding all associated transformation losses.

### 4.2. The Granger Causality Results

The results of the Granger-Causality test (with equations 1 and 2) are provided in table 1 below. From the results, the Null hypothesis that EC does not Granger-cause EG cannot be rejected since the F-statistic (0.7133) is not significant even at 10% level. However, the statistical significance of the F-statistic value of (10.5264) is at both 1% and the conventional 5% level, we reject the Null hypothesis that EG (the natural log of real GDP) does not Granger caused energy use (LNEC). The implication of this is that there is a *unidirectional* causality running from economic growth to energy consumption without feedback in Iran.

**Table 1. Granger Causality Results for Iran**

Null Hypothesis:	Obs	F-Statistic	Prob.
LNGDP does not Granger Cause LNEC	41	10.5264	0.0003
LNEC does not Granger Cause LNGDP		0.71334	0.4968

*Source: Author's computation from E-views 9*

### 4.3. The Vector Autoregressive (VAR) Model Results

Table 2 below contains the results of the VAR models of equations 3 and 4. The optimal lag length determined by the Akaike Information Criterion for each dependent and the other independent variable in each equation is -2 (i.e. first and second lags). Equation 3 postulates that current economic growth (EG) depends on itself at lags 1 and 2, and the immediate past values of energy consumption (EC). From the results, economic growth (EG) exhibits positive and statistically significant relationship with its immediate past values and negatively related to

second lag values but not statistically significant with both first and second lag values of EC. The corresponding equation 4 hypothesis that energy consumption (EC) depends on its lag 1 and 2 values and past values of EG. The results show that a unit increase in EC at lag 1 will result in 0.462 unit increase in current energy consumption and 0.695 units in lagged EG values. These outcomes generally corroborates that of the causality results that economic growth stimulates energy use and not the other way.

**Table 2. The Results of the Vector Auto Regressive (VAR) Model**

Variable	EC			EG		
EC(-1)	0.461621	(0.19250)	[ 2.39797]	-0.096342	(0.24283)	[-0.39676]
EC(-2)	0.468550	(0.18358)	[ 2.55229]	0.114766	(0.23157)	[ 0.49560]
EG(-1)	0.686515	(0.15435)	[ 4.44765]	1.504795	(0.19470)	[ 7.72868]
EG(-2)	-0.694757	(0.15142)	[-4.58822]	-0.58957	(0.19100)	[-3.08670]
C	0.603563	(0.28317)	[ 2.13145]	0.504506	(0.35719)	[ 1.41243]
R-squared		0.9895			0.9286	
Adj. R-squared		0.9884			0.9206	
F-statistic		850.1947			116.9585	

*Author's computation from E-views 9*

#### 4.4. Results of the Unit Root Tests

Both the Augmented Dickey-Fuller (ADF) and the Philip Perron (PP) tests criteria were used in this study to conduct unit root test on the economic growth (EG) and energy consumption (EC) variables. The lag lengths were chosen automatically based on Schwarz Information Criterion (SIC). The results presented in table 3 below show that while both variables are stationary at first difference, they are not at levels. Therefore, both series EG and EC are of the order I(1) with the computed ADF and PP t-Statistics of (EC, -4.16; RG, -4.52) and (EC, -3.84; RG, -4.66) respectively. These estimates are statistically significant at 5% levels.

**Table 3. Augmented Dickey Fuller (ADF) and Philip-Perron (PP) Unit Root Test Results**

Null Hypotheses: $\delta(\text{RG})$ has a unit root; $\delta(\text{EC})$ has a unit root							
Lag Length: 0 (Automatic based on SIC, MAXLAG=9)							
Variables	ADF Test Critical Value	ADF test Stat	Prob. value	Order of Integration	PP Test Critical Value	PP test Adj. t-Stat	Prob. value
EC	-3.5298	-2.2243	0.1006	I(0)	-3.5298	-0.9194	0.3695
$\delta(\text{EC})$	-3.5331	-4.1601	0.0114	I(1)	-3.5331	-3.8421	0.0162
EG	-3.5331	-1.2056	0.8984	I(0)	-3.5298	-0.7181	0.7954
$\delta(\text{EG})$	-3.5331	-4.5072	0.0059	I(1)	-3.5331	-4.6623	0.0035

Source: Author's computation from E-views 9

#### 4.5. Co-integration Tests and Analysis

Since both the economic growth and energy consumption series contain unit root, the study conducts a cointegration test put forward by Johansen to ascertain whether the variables have a common stochastic trend. The results of the Johansen cointegration tests (appendices 1) show that the variables are co-integrated with both the trace and Eigenvalue tests statistics indicating at least two (2) co-integrating equations. All the applicable statistics of the cointegration results indicates that the variables are cointegrated and that both EG and EC have a linear combination (see table 4). However, the Durbin-Watson test confirms that the residual is stationary. Altogether, this result implies that both economic growth and energy consumption do not follow “random walks” in the end and the implication therefrom is that there exist a long run equilibrium relationship between EG and EC in Iran.

**Table 4. Cointegration Test Results**

	t-Statistic			Prob.*
ADF test statistic		-5.2801		0.0021
Test critical values:	1%	5%	10%	
	-4.2529	-3.5485	-3.2071	

	Coefficient	Std. Error	t-Statistic	Prob.
ECM(-1)	-1.2013	0.0119	-4.2801	0.0000
C	-5.9224	428.6315	-0.3154	0.7412
@TREND(1970)	7.1546	62.5742	0.1778	0.5605
<i>R-squared</i>	0.6945			
<i>22Adjusted R-squared</i>	0.6464			
<i>Durbin-Watson stat</i>	1.9688			
<i>Log likelihood</i>	141.972			
<i>F-statistic</i>	21.782			
<i>Prob(F-statistic)</i>	0.0000			

Source: Author's computation from E-views 9. Note: Null Hypothesis: ECM has a unit root

#### 4.6. Estimation Results for Error-Correction Mechanism (ECM)

The result of the short term dynamic specification as regard the error correct mechanism (ECM) is presented in table 5 below. In the regression, D(EC) captures the short run disturbances while the ECM(-1) shows the adjustment toward the long run equilibrium. The results show that short run changes in energy consumption (EC) exerts significant positive effects on economic growth (EG) while the error-correct term is not statistically significant. The ECM only correct about 0.001 of the discrepancy between the actual and the equilibrium or long run value of economic growth (EG) in a year.

**Table 5. Error-Correction Mechanism Results**

Included observations: 41 after adjustments				
	Coefficient	Std. Error	t-Statistic	Prob.
D(EC)	0.0039	0.0007	5.3493	0.0000
ECM(-1)	0.0012	0.0009	1.3323	0.1924
C	-4.5632	3.6881	-1.3146	0.2016
<i>R-squared</i>	0.4903	<i>F-statistic</i>	15.0540	
<i>Adjusted R-squared</i>	0.4574	<i>Prob(F-statistic)</i>	0.0002	
<i>Durbin-Watson stat</i>	1.8139	<i>Akaike info criterion</i>	6.8132	

Source: Author's computation from E-views 9

## 5. Conclusions

The quest for effective demand management strategy in the Iranian energy industry began in 2009 with the adoption of fuel rationing policy. As a follow up on this conservative strategy, the country further commenced a major pricing reforms in late 2010. All these are meant to correct the prevailing inefficiencies in the pricing of energy products. This trend has become customary in many oil rich developing economies of the world. When governments set the domestic oil and energy prices below the free market costs, there is that tendency for both over consumption and inefficiency in the use of energy. However, rationing and other energy conservation policy can disrupt the pace of domestic productivity and slow down the trend of economic progress particularly where the causal relationship between the country's growth and energy runs from the latter without feedback.

This study is therefore motivated by the need to explore the causal relation and the long run energy-economy relationship in Iran. The results show that both energy and growth have long run relationship but the former does not granger cause the latter. By implication, subsidy removal, rationing and other conservative demand management policies currently been pursued by the government of Iran to reform the energy sector are good steps in good direction. The observation from available evidence is that energy-economy link varies across countries, we therefore suggest that other countries proposing reform in their energy sector explore similar investigation.

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## Appendix

<b>Unrestricted Cointegration Rank Test (Trace)</b>				
Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.506121	42.41668	25.87211	0.0002
At most 1 *	0.280421	13.49265	12.51798	0.0342
Trace test indicates 2 cointegrating eqn(s) at the 0.05 level *denotes rejection of the hypothesis at the 0.05 level **MacKinnon-Haug-Michelis (1999) p-values				
<b>Unrestricted Cointegration Rank Test (Maximum Eigenvalue)</b>				
Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.506121	28.92403	19.38704	0.0015
At most 1 *	0.280421	13.49265	12.51798	0.0342
Max-eigenvalue test indicates 2 cointegrating eqn(s) at the 0.05 level *denotes rejection of the hypothesis at the 0.05 level **MacKinnon-Haug-Michelis (1999) p-values				

## Commercial Activity or Banking Competition?

Rose-Marie Pușcaci<sup>1</sup>

**Abstract:** The study analyzes the competition on the banking market and proposes an overview of debt collection companies through the economic crisis which has profoundly affected the banking sector. Article scroll through the main features of competition on the banking market as well as the domain weaknesses that negatively influenced the banking system performance. Even if there is not a sufficiently transparent and functional legal framework and debt recovery market is not supervised enough, it is among the few markets that increase from year to year. Increasing competition from adjacent companies that compete with banks, namely, a non-banking entity, it is stimulating the banking system which will thus become more constructive. It is estimated, that in terms of customers, there will be no differentiation between the banking industry and non-banking entities that will reshape the Romanian banking system soon. Also, the study aims to highlight the existence of debt collection companies, implicitly, the specific markets, it is only a consequence of excessive, unnecessary and dangerous borrowing from previous years. Avoiding bad loans from banks, a fair competition from banks and from non-banking institutions, in the long term, it will generate a balance in the market and it will support economic growth of Romania.

**Keywords:** Portfolio; Banking crisis; Bank lending; Borrowing; Credit

**JEL Classification:** G110; G210

*“The bank is where you borrow money if you prove that you do not need them”*

Bob Hope

*“Competition brings out the best in products and the worst in people that”*

David Sarnoff

### 1. Introduction

The success of banking institutions, the same as that of any company, is guaranteed when it fails to fulfill its economic role better than the competition. The primary aim of the banks is to attract customers and to achieve this, they need innovation, quality, professionalism, products and services closer to customers' needs, as well

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as many competitive advantages. Banks should focus on people and their needs, not just profit.

## **2. Conceptual Background**

Charles B. Carlson (2010) studied the evolution of the financial markets and wrote a work for us, in order to gain a better perspective of how we can protect ourselves for the future in this context of the competition, in a changing economical world.

Sun Yu (2011) investigates the level of bank competition in the euro area, the U.S. and U.K. before and after the recent financial crisis and revisited the issue whether the introduction of EMU (European Economic and Monetary Union) and the euro have had any impact on bank competition. The results suggest that the level of bank competition converged across euro area countries in the wake of the EMU. The recent global financial crisis led to a fall in competition in several countries and especially where large credit and housing booms had preceded the crisis.

Cezar Mereuță and Bogdan Căpraru (2012) in their work evaluate the competition in the Romanian banking system as regards the distortions in terms of market shares and the origin of capital, for the period 2000-2010, using the methodology of the structural analysis of the markets. Thus, they firstly check the features of structural distributions of the market shares in the case of the Romanian banking system, in the period 2000–2010.

Phil DeMuth and Ben Stein (2013) explain the primary asset protection and tax minimization strategies that work for those in the high-net-worth bracket. Here are investment strategies for the affluent, as well as for those who are approaching affluence and are trying to take that big step forward.

Nicolae Dănilă and collectively (2010), in their book, they wish to initiate an open platform for debate, provide extra relevant information in this field and to capture the connections between banking and macroeconomic balance in a context globalized.

Ali Mirzaei and Sharjah Tomoe Moore (2015) investigate whether the recent financial crisis has had any adverse impact on bank competition for 24 emerging and 25 advanced countries with large and small-size banks over the sample period 2001-2010.

## **3. Methodology**

The study is conducted on the banking market in Romania and it is structured on the basis of systematic investigations on banking competition. Article combines theoretical and descriptive research and qualitative research with secondary

quantitative research. Statistical data processing is done with Minitab software<sup>1</sup>.

#### 4. Contents

Comparative analysis between the evolution of interest and the situation of commissions for banking services, that cover the largest number of customers, indicating a superior market power to banks in relation to customers and a relatively low level of competition generated by the uniform commissions.

A high competition can improve the economic performance of a country but, also, it can open business opportunities for its citizens and it reduce the cost of goods and services throughout the economy. However, many laws and regulations restrict competition in the market. Many of them go beyond the necessary scope to achieve its policy objectives. Governments can reduce unnecessary restrictions applying “Competition Assessment Toolkit” of the Organisation for Economic Co-operation and Development (OECD). The toolkit provides a general methodology for identifying unnecessary constraints and policy development alternative, less restrictive, which are meant to achieve the objectives of government. One of the main toolbox is a checklist on issues of competition that addressed a series of simple questions to detect potential laws and regulations which restrict competition. This test focuses the limited government resources faction areas where competition assessment is imperative.

Government is often involved on markets to regulate the behavior of companies. These interventions may be based on solid economic reasons, such as preventing market crashes that may occur externalities, common oversight of public resources and public goods, limiting the market power and reducing inefficiencies caused by insufficient or asymmetric. In addition to economic regulations, governments regulate the conduct of companies to promote important objectives in the areas of health, safety and environmental quality. (Ghosh, pp. 415-444)

Compliance with competition law has become one of the main aspects that a company should consider when defining its long-term strategy. A competition law issue may occur not only because of the particular conduct of members of company management but, more frequently, due to behavior of intermediate management staff or even ordinary employees. That is why raising awareness and ensuring an efficient compliance with competition law among staff at all levels of a company is a must.

Since its establishment in the Treaty of Rome in 1957, EU competition policy has been a big part of the European Union. The Treaty provides for a “system to

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<sup>1</sup> Minitab is the leading software used for statistics education at more than 4.000 colleges and universities worldwide. More students learn statistics with Minitab than with any other software.

prevent distortion of competition within the common market". The objective was to create ample and effective competition rules, to ensure the proper functioning of the European market and to give consumers the advantages of a free market system.

Competition policy involves the application of rules to ensure fair competition among companies. This encourages the development of business initiatives and increase efficiency, enable consumers to benefit from a wider choice and reduce prices and improve quality. These are the reasons why the European Union fight against anti-competitive behavior, evaluates merger and state aid and encourage liberalization.

Regarding competition in the banking market, the European Union has set up organizations to regulate competition and to contribute to safeguarding the stability of the European Union's financial system by ensuring the integrity, transparency, efficiency and orderly functioning of securities markets, as well as enhancing investor protection.

The European system set up for the supervision of the financial sector is made of three supervisory authorities: the European Securities and Markets Authorities (ESMA), the European Banking Authority (EBA) and the European Insurance and Occupational Pensions Authority (EIOPA). The system also comprises the European Systemic Risk Board (ESRB) as well as the Joint Committee of the European Supervisory Authorities and the national supervisory authorities.

Together with national supervisory authorities which are responsible for the supervision of individual financial institutions, the objective of the European supervisory authorities is to improve the functioning of the internal market by ensuring appropriate, efficient and harmonized European regulation and supervision<sup>1</sup>.

In particular, ESMA fosters supervisory convergence both amongst securities regulators and across financial sectors by working closely with the other European Supervisory Authorities competent in the field of banking (EBA), and insurance and occupational pensions (EIOPA)<sup>2</sup>.

The European Financial Stability Facility (EFSF) was created as a temporary crisis resolution mechanism by the euro area Member States in June 2010. The EFSF has provided financial assistance to Ireland, Portugal and Greece. The assistance was financed by the EFSF through the issuance of bonds and other debt instruments on capital markets<sup>3</sup>.

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<sup>1</sup> <http://www.eba.europa.eu>.

<sup>2</sup> <https://www.esma.europa.eu>.

<sup>3</sup> <http://www.efsf.europa.eu>.

## **5. Competition - is it a Guarantee of the Efficiency of the Banking System?**

Banks do not operate in an isolated environment, being under the impact of economic environment, banking regulations and competition. However, the competition is the most aggressive influence for bank performance.

Banking competition takes place both in funds raised and in the area of credit. Competition of deposits is limited on offered interest rate and repayment capacity of deposits at maturity. Competition of credits is more important concern for banks, which must choose customers representing a minimal risk of loss. Current customers and potential ones are important for the bank as well. Banks should take care to maintain as much as possible the present customers. The bank may have cost ten times higher to attract a new customer than to keep an existing one.

Regarding the domestic banking system, attesting to the dominance of a few large banks in the system on most banking services, which undermines the existing level of competition in banking in our country.

Another indicator that may be a measure of market power of players in the banking sector is the difference between interest rates for loans and deposits, interest indicator called spread. The difference between the interest rate for loans and deposits is determined by issues such as the rating of the country, the cost of financing etc., but depends to a large extent on the existing banking competition in that country.

A strong competitive factor is the presence of foreign banks in the market. When a foreign bank enters on the market, it brings financial know-how acquired in its home country, bank management techniques, innovative products and services. Thus, foreign banks are designed to modernize the banking system of the host country, to strengthen competition and increase efficiency of banking activity.

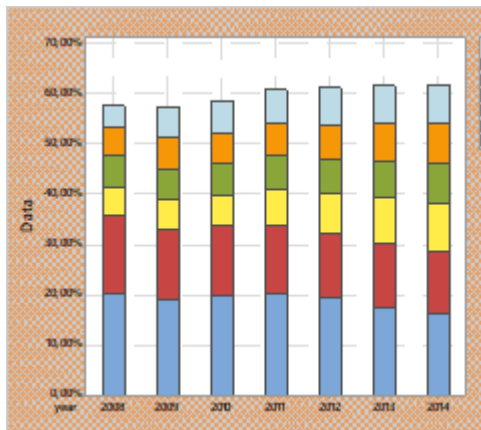
Competition guarantees the effectiveness of banking. A low level of banking competition allows banks to put on the customers' shoulders the costs of an inefficient business and of an undervaluing impact of certain risks. Under a disloyal behavior towards clients, the bank is likely to lose and this is the worst financial penalty that the banking institution can give itself. Banking competition provides innovation and efficiency and the latter leads to "loyal" customers because in this way they get what they want, what they need and the tariff or the price willing to pay for that service or banking product.

## 6. Is Competition in the market for distressed - being growing?

In our country, lending is the most important activity of credit institutions. From 2008 until March 2014, the NPL (bad loans) was in a constant growth. Primarily, this is due to economic crisis that made a large volume of loans granted during 2005-2008 to become distressed. This affected both the population and the banking sector, reaching the NPL in March 2014 to 22.23%.

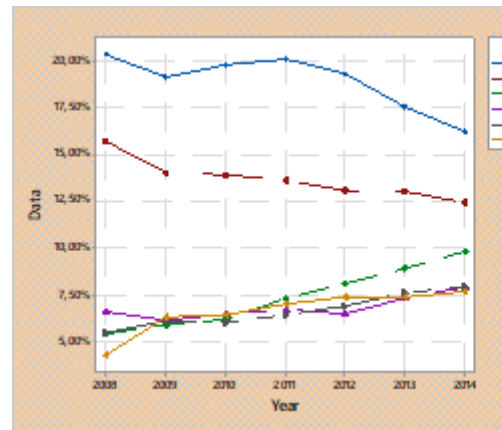
According to representatives of the National Bank of Romania, the largest share of bad loans in total loans in outstanding debts were in September 2014, when NPL in trade was 29.6%, in manufacturing 23.55%, in construction 14.43% , in services 13.95% and in real estate was 12.92%.

The fewer bad loans were in agriculture and energy sectors, which together generated less than 5% of NPLs.



**Figure 1 Shifts in market shares of the main banks in Romania in time and structure from 2008-2014**

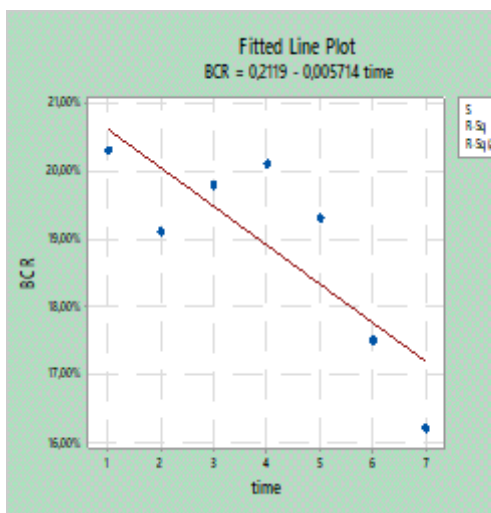
*Source: data from the National Bank of Romania*



**Figure 2. Shifts in market shares of the main banks in Romania in time from 2008-2014**

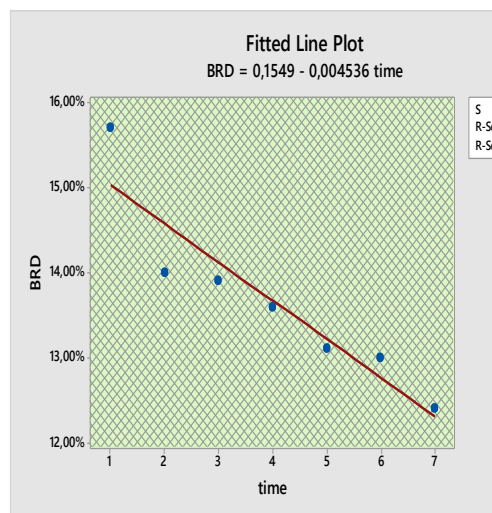
*Source: data from the National Bank of Romania*

Next, in Figure 3-4, we will analyze the data corresponding to the main two banks, BCR and BRD.



**Figure 3. Bad loans trend of BCR from 2008-2014**

*Source: data from the National Bank of Romania*



**Figure 4. Bad loans trend of BRD from 2008-2014**

*Source: data from the National Bank of Romania*

Regression equation of the market share for BCR is next:

The regression equation is  $BCR = 0,2119 - 0,005714 \text{ time}$

$S = 0,00950489$   $R\text{-Sq} = 66,9\%$   $R\text{-Sq(adj)} = 60,3\%$

Analysis of Variance

Source	DF	SS	MS	F	P
Regression	1	0,0009143	0,0009143	10,12	0,025
Error	5	0,0004517	0,0000903		
Total	6	0,0013660			

Regression equation of the market share for BRD is next:

The regression equation is  $BRD = 0,1549 - 0,004536 \text{ time}$

$S = 0,00427534$   $R\text{-Sq} = 86,3\%$   $R\text{-Sq(adj)} = 83,6\%$

Analysis of Variance

Source	DF	SS	MS	F	P
Regression	1	0,0005760	0,0005760	31,51	0,002
Error	5	0,0000914	0,0000183		
Total	6	0,0006674			

Regression equations of the market share, in both banks, demonstrate that from year to year, the market share of the two banks is diminishing, as evidenced by the negative coefficient, so 0.005714 and 0.004536.

In numerical terms, this market share is reduced from one year to another with 0.5714% in the case of BCR and 0.4536% in the case of BRD.

In this regression model, the relationship between market share and time, R-Sq, which in the case of BCR is 66.9% and in the case of BRD is 86.3%, is strong.

In terms of variation, regression is acceptable because of p value which is 0.025, respectively 0.002, lower values than the threshold value of 0.05, which represents the critical level corresponding to a probability of 95%.

The conclusion of the analysis carried out in the 2008-2014 period, shows that the market share of the main two banks have a downward trend, while banks which initially had a small market share, and now record increases. In the near future, because of this divergent trend, Transylvania Bank is likely to achieve market shares of BCR or BRD. It can be considered, that this divergence may be a consequence of a functional banking competition.

Lending activity generates both performing loans and non-performing loans, due to faulty risk management.

Non-performing loans occur when there is a delay in repayment of debt of 90, 180, 360 days and the payment of the liabilities assumed are not insured or are partially insured. On analysis, bad loans are those which are impossible to be repaid at deadlines, as a result of damaged activity of the client.

However, bad loans represent an inevitable consequence of lending activity. Each loan involves occurrence of unanticipated events, which sometimes makes impossible the terms of the credit agreement for the customer.

Direct risks of bad loans are on the stability of the banking system, if it materializes in the high costs of the banks and on economic growth too. A low economic growth rate attracts increasing non-performing loans, but, also, there are opposite effect according to which bad loans negatively affect economic growth.

Debt collection market has entered into a mechanism and it is a more professional market, more competitive and has a growing number of collectors. The retail banks have sold largely of balance sheet and therefore they have a cleaning and rehabilitated balance sheet.

Currently, there is a trend of increasing market competition in collecting receivables, stimulated by the fact that the industry has growth potential, especially in the corporate area, which has not developed as much as retail. If two years ago there were about 10 players in this market, now the number is much higher. Besides companies profile, there are many global investors interested in the corporate segment, particular. They come from Asia, especially from Hong Kong, China and London or the United States, Switzerland etc. This trend makes the collection of receivables market to be very dynamic, a competition for proper

portfolios sold by banks increasingly fierce.

Specialists consider that the collection of receivables market in Romania attracts investors because it has been profitable so far but in perspective, it is impossible to estimate whether the money invested will attract necessarily a profit. More competition means higher prices for banks' portfolios and higher costs for industry. On the long term, it is possible that investors who have invested considerable sums of money in this area, will not consider this market as profitable because of the lack of a sustainable business model.

If the retail loans market seem to be completed, in the next two years corporate portfolios will be sold for 5 - 6 billion as indicate by sources of debt collection companies. Some examples of Romanian banking activity are very conclusive in this regard, as follows:

General Manager of Kredyt Inkaso<sup>1</sup>, Andrei Mocanu, said that the company represented by him has sufficient funds to invest in these portfolios. Being a strong company, listed on stock exchange, with business both in market activity from Romania, but also from our neighbors, it has the ability to purchase receivables of this type of loans. Currently, the company is involved in several transactions, with large oscillating portfolios while classical portfolios sold regularly and they have the same dynamic<sup>2</sup>.

Victor Angelescu, general manager of Asset Portfolio Servicing (APS)<sup>3</sup> Romania specifies that the company he leads has a portfolio of performing and non-performing loans of 2.2 billion and his team recover in 95% more than investing.

"In 2014 APS had approximately 200 employees and it had recovered 600 million. I bought packages from 180 days to 3.000 days. Everyone knows what to do for retail loans. Volksbank transaction craving large investment funds on Romanian market", added Angelescu. He believes that if Deutsche Bank, the biggest German bank, came here and it invested in portfolios of bad loans, it drew attention to other potential investors.

Industry representatives argue that if banks should be more open and easier to outsource non-performing loans, then the recovery would be greater, considers Andrei Cionca, CEO of CITR Group<sup>4</sup>. Cionca claims that outsourcing platforms, such as debt recovery companies, is a better dialogue partner for them. The main

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<sup>1</sup> Kredyt INKASO is a market leader in receivables management services in Poland. Since 2001 works with the base institutions (e.g. banks, insurance companies) and, also with companies which are offering telecommunications services.

<sup>2</sup> [www.zf.ro/banci-si-asigurari/creste-concurenta-pe-piata-de-neperformante-14427584](http://www.zf.ro/banci-si-asigurari/creste-concurenta-pe-piata-de-neperformante-14427584).

<sup>3</sup> Asset Portfolio Servicing is a recognized financial group that provides servicing, underwriting and asset management services across Central and South Eastern Europe.

<sup>4</sup> With an experience of over 14 years in the insolvency practitioner activity, CITR is the Romanian market leader in this domain, a true opinion shaper, a motivation engine in this type of business.



problem is liquidity Romanian market and this could be solved if the bank non-performing loans by specialized firms outsource debt collection.<sup>1</sup>

In this field, competitors of banks are represented by the bank institutions engaged in similar activities. These may be crediting financial institutions, non-banking institutions, international financial organizations. Competitive relations are customized, on the one hand, due to the rigid nature of the offer banking services which excludes “exactly approximation” of the products and, on the other hand, because the means used in the struggle competition.

Because the level of competition in the banking sector can influence the level of risk incurred by players portrayed in this market, competition policy in this area must include a macroeconomic component. As noted in the survey on lending published in 2014, credit standards were more restrictive in the second quarter of 2013. This is proven by the decrease of LTV58 indicator (loan to value) for new loans by 12%, its new value being 65%.

The entire Romanian banking system can overcome this stage of syncope and it can reorganize by changing customer behavior regarding lending system, by removing non-performing loans and non-bank competition. These elements can help to restore a situation of balance that will attract and sustain economic growth of Romania.

## **7. Conclusions**

Looking ahead, increasing concentration is a cause for concern for some markets, increasing this indicator is a direct consequence of the crisis that has removed some banks from the market. The financial crisis has seriously affected the activity of banks, both revenue and profit rates is significantly reduced. The crisis has affected the evolution of financial return on equity (ROE) that the values of 15-20% which is considered reasonable in the banking sector in normal market conditions dropped to zero and even turned negative in some periods. Large banks have suffered less significant changes of these indicators as opposed to small banks whose profitability has been much affected, taking even negative.

Although banks have developed negatively in the period 2008-2015 in terms of revenues, the situation of the banking sector indicate a favorable trend in terms of competition in the Romanian banking sector. In recent years, there is a tendency to reduce the differential between the interest rate on loans and deposits. Also, the concentration indices show a high concentration in small to medium sector which indicates a relatively high degree of competition.

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<sup>1</sup> [www.zf.ro/banci-si-asigurari/creste-concurenta-pe-piata-de-neperformante-14427584](http://www.zf.ro/banci-si-asigurari/creste-concurenta-pe-piata-de-neperformante-14427584).

Despite all the difficulties currently facing the banking system in Romania, because of the crisis and because of wrong decisions taken in the past by clients and banks as well, banks competitive mechanism seems to work.

Increasing lending conditions are not a concern regarding competition in the banking sector, but corroborating its high level of indebtedness of clients leads to the reduction of customer mobility. As it is known, an increased level of customer mobility is the effect of a normal competitive environment and the purpose of competition law, precision in art. 1 of the Competition Law, it is precisely maintain and stimulate competition and a normal competitive environment, in order to promote consumer interests.

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## **The Exploitation of Tourism Resources in Braila City, Port on the Danube River**

**Anca Gabriela Turtureanu<sup>1</sup>**

**Abstract:** The port city on the Danube, Braila has a long tradition in travel. This Danubian port appears named “Drinago” in an old Spanish geographical description and travels, “Libro del conocimiento/Book of Knowledge” (1350) and several Catalan maps (Angellino de Dalorto, 1325-1330 and Dulcert Angelino, 1339). Intense commercial transactions carried out in port, the opportunity of achieving high and quick results have attracted many foreign merchants - Bulgarian, Macedonians, Albanians, Greeks, but also French, Belgian, Austrian, Italian, Hebrew, and many Romanians from Transylvania, thus Braila became a multiethnic entity. Future activities, specific to the trade from ports enlist it on the tourist map of Romania. Tourism resources are the most diverse. The natural resources combine the picturesque ponds and lakes with the charm of wild beaches or protected areas such as the “Balta Mica a Brailei/The Small Pond of Braila”.

**Keywords:** tourism; Danube port; economic development

### **Introduction**

Numerous studies concerning the origin of Braila show that the region was inhabited since ancient times, this is confirmed by the archaeological remains dating from 5000 BC, relics that testify the continuity of life and civilization in this region. Traditions, habits and their beliefs were integrated into the cultural and spiritual life of the city. Panait Istrate, Panait Cerna, Fratii Minovici, Maria Filotti, Ana Aslan, Mihail Sebastian, D.P. Perpessicius are outstanding personalities of science and culture, world-renowned reputation that made the city famous and they are the proud and joy of its inhabitants.

### **Tourism Resources**

The anthropogenic resources are concentrated in a relatively small number of centers, among them most notably being Braila City. Braila, the oldest and largest

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urban center of the county, is unique by a number of sights of great value such as “Maria Filotti” Theatre, Puppets Theatre, History Museum with numerous objects and documents on the evolution of the city and surroundings. The museum has a model of the Braila citadel, which was located in the area of the current Central Park in the Traian Square, and a copy of the urban plan elaborated during 1831-1835, in the plans it was set up the basis of systematizing the city in the shape of an amphitheater. The Museums from Braila have a rich collection of paintings, sculptures and graphics of Roman masters. Braila is also famous for its architecture and we should mention: The “Buna Vestire” Church known as the “Greek Church” with numerous frescoes painted by Gh. Tatarascu, the Church “Sf. Arhangheli Mihail si Gavril” former mosque, converted in 1831 into Orthodox Church. In Braila it is the world headquarters of the Lipovan community and the Episcopal Church of the old rite Orthodox Christians. Other objectives of historical value are presented in the network of cellars and city wall fragments of the Braila citadel. In the southwestern part of the city is the largest park of Braila, the Monument Park, recreation area and beyond, as here it can be visited the Museum of Natural Sciences, but also there may be practiced sports on specially designated fields.

The natural resources are dominated by the Danube.

Braila County, although it is not located in an area of utmost importance for tourism, offers many possibilities for the development of active partnerships due to, in part, resources of natural factors: the opening of the Danube and the presence of lakes, many of them rich in salts slightly soluble, with therapeutic qualities, for which some of them are used in the treatment of diseases. There are salt lakes, shallow, present in the floodplains of Ialomita and Siret in full steppe. Being stationed on the bottom of near oval depressions (the ones in the plain between Buzau and Ialomita) or within elongated depressions such as valleys, it explains their origin as meander and left arm lakes. They have got into the attention of specialists geologists, balneologist botanists for some time due to particular properties of water and mud of some lakes, such as Salt Lake/Lacu Sărat, Căineni, Movila Miresii/Bride's Mound.

By the Law no. 5/2000 on the approval of the National Landscaping Plan - Section III of protected areas, there are identified three protected areas: the Small Pond Natural Park of Braila within the list of “Biosphere Reserves, the National or Natural Park with an area of 17 529 ha”; it was originally established as a nature reserve in 1979 and reconfirmed it in 1984. It has global avifauna value, which is designated as a wetland of international importance by the Ramsar Convention Secretariat. In 1999 it was observed a total of 101 bird species that nest here; the Camnita Forest, a protected area of national interest with a surface of 1.30 ha; the forest reservation is located in Buzau River floodplain and the entire forest is protected by an elongated parcel of pure *Fraxinus*; the Ornithological reserve Lake

Jirlău-Vișani, a protected area of national interest on a surface of 930 ha; the aquatic vegetation has favored nesting or only stopover for many species of birds.

Subsequently there were identified new natural treasures of county interest, contributing to the development of the protected areas network: Popina Blasova - natural monument, located in Balta Braila, witnessing the Hercynic erosion; Blasova Lake - oxbow lake, located in Balta Brailei; Movila Miresii Salt lake, as ornithological reserve; Zăton Lake - oxbow lake, located in Balta Brailei; Căineni Lake as ornithological reserve; Vișoara forest as forest reserve, with a surface of 1693.6 hectares.

**Protected area assessment (conducted by the Institute of Geography of the Romanian Academy)**

The name of the protected area	Territorial-Administrative Units	Points (maximum 5)
Natural Park Balta Brailei	Braila	5
Natural Park Balta Brailei	Chiscani	5
Natural Park Balta Brailei	Tichilesti	5
Natural Park Balta Brailei	Gropeni	5
Natural Park Balta Brailei	Tufesti	5
Natural Park Balta Brailei	Stancuta	5
Natural Park Balta Brailei	Bertestii de Jos	5
Jirlau Lake- Visani	Jirlau	3
Jirlau Lake- Visani	Visani	3
Jirlau Lake- Visani	Galbenu	3
Camnita Forest	Sutesti	2

Source:

[http://www.cjbraila.ro/Portal/Braila/CJBraila/portal.nsf/All/E1F42BEFBCD9B11AC2257656002A4F98/\\$FILE/TURISM.pdf](http://www.cjbraila.ro/Portal/Braila/CJBraila/portal.nsf/All/E1F42BEFBCD9B11AC2257656002A4F98/$FILE/TURISM.pdf)

Of particular importance in the domain of tourism exploitation of the Braila territory are the balneary resources that are based on curative mud from the salt lakes. The salt Lakes from Bărăganului Plain have waters with high content of chlorides and alkali sulphates, to which it is added bromide and sodium iodide, along with significant quantities of therapeutic mud, which is why they have been recommended for nearly a century by the balneologist researchers for spa

treatment. Numerous geomorphological and geological, hydro chemical studies aimed at explaining the origin of lakes and their salinity. It is known that in terms of genesis, the lakes can be grouped into three categories - lakes located in the water meadow of the Danube and rivers, located at the confluence of rivers or located in depressions without drainage and the salinity comes from contributions salts via groundwater (springs), from the inflow of surrounding ground water or runoff waters washing the salts deposited in the capillaries of the rocks. In the county of Braila, they were exploited in various periods or were exploited partly by simple arrangements or by appropriate facilities, therapeutic resources of Salt Lake / Braila, Lake Căineni and Lake Movila Miresii.

At a distance of only 5 km from Braila, on the lakeside of Salt Lake, it is the balneary resort spa Salt Lake, located 16 m above the sea level and it is surrounded by 70 hectares of forest that mitigate the climate steppe thus making from the resort a pleasant resting place. The lake with high salinity is an old course of the Danube, being now blocked. The bottom of the lake is covered with therapeutic shore. The therapeutic value of the water and mud from Salt Lake resort is known for a long time by the inhabitants of this region, but lately, many tourists come here for treatment. Danube also attracts tourists due to specific flora and fauna related the hydrographical network that give a special note to tourism offering the opportunity to hunt and fish. The tourism offer of the Braila County consists also in cruises on the Danube, with accommodation and special tourist programs (fishing, hunting, etc.) on the Small Island of Braila, Fundu Mare, Corotisca, Blasova and Zaton.

The Tourism in Braila area reunites well-known forms of tourism – the balneary and circulation tourism has the largest share. Other types of tourism: *treatment, recreation, sport fishing, nautical tourism* – which are achieved spontaneously, picnic and as an included non-dissociated form, valid for all types *knowledge tourism*, confused at some point with *cultural tourism*.

Tourism transport on nautical ways has been noticed since the beginning of the century, especially by high-income tourism consumers. The appeal of traveling on water as the main leisure and not only as a possibility of accessing a tourism destination has giving birth to “cruise” - travel arrangements comprising transport and other tourism services provided during the trip. Braila, a Danube port, was until recently linked to other river ports from the downstream up to Sulina and upstream up to Hirsova by scheduled passenger ships. In the recent years, however, due to high costs and fewer passengers, these cruises have been canceled, so as currently Braila no longer benefits from river transport of passengers. Nevertheless it is maintained the link with Dobrogea via ferries that carry passengers and vehicles. For recreational cruise there are used two passenger ships: “Salt Lake” and “Borcea”, the only ship with paddle driven by a steamer engine built in 1845.

## Tourism Traffic

The tourism accommodation capacity indicator can highlight the possibility of promoting the tourism flow. The table below shows that the tourist accommodation capacity has an upward trend in the period 2010 -2012 with a maximum number of seats in 2013. In the following period a decrease is observed.

**Table 1. Tourist accommodation capacity by types of tourist accommodation structures, Braila counties and cities / places**

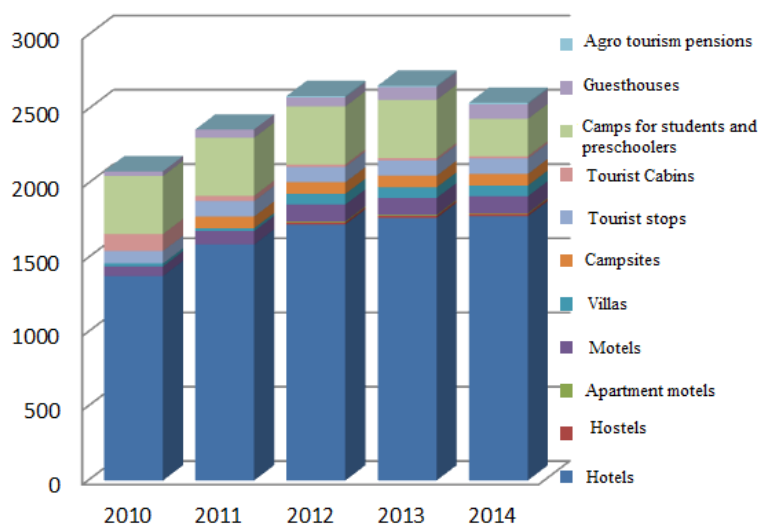
<b>Tourist accommodation capacity by types of tourist accommodation structures, Braila counties and cities / places</b>					
	<b>Year 2010</b>	<b>Year 2011</b>	<b>Year 2012</b>	<b>Year 2013</b>	<b>Year 2014</b>
<b>Total</b>	2082	2364	2589	2659	2544
<b>Hotels</b>	1377	1589	1724	1768	1780
<b>Hostels</b>	:	:	15	15	15
<b>Apartment motels</b>	:	:	6	6	6
<b>Motels</b>	64	90	113	113	113
<b>Villas</b>	20	20	72	72	72
<b>Campsites</b>	:	78	78	78	78
<b>Tourist stops</b>	84	104	104	104	104
<b>Tourist Cabins</b>	114	36	16	16	16
<b>Camps for students and preschoolers</b>	391	391	391	391	251
<b>Guesthouses</b>	32	56	60	86	99
<b>Agro tourism pensions</b>	:	:	10	10	10
<b>© 1998 - 2015 NATIONAL INSTITUTE OF STATISTICS</b>					

**Table 2. Arrivals of tourists in the structures of tourists' reception by type of establishment, in Braila County / No. of tourists**

<b>Arrivals of tourists in the structures of tourists' reception by type of establishment, in Braila County / No. of tourists</b>					
	<b>Year 2010</b>	<b>Year 2011</b>	<b>Year 2012</b>	<b>Year 2013</b>	<b>Year 2014</b>
<b>Total</b>	51052	66411	62050	57078	56246
<b>Hotels</b>	45905	60717	52892	48029	46243
<b>Hostels</b>	:	26	709	534	166
<b>Apartment motels</b>	:	:	125	:	:
<b>Motels</b>	359	586	1674	1367	1375
<b>Villas</b>	2118	1368	2139	1684	1811

<b>Campsites</b>	:	435	372	309	97
<b>Tourist stops</b>	705	945	1449	1338	1963
<b>Tourist Cabins</b>	237	6	:	:	:
<b>Camps for students and preschoolers</b>	810	1103	759	1233	881
<b>Guesthouses</b>	918	1225	1739	2228	3019
<b>Agro tourism pensions</b>	:	:	192	356	691
<b>© 1998 - 2015 NATIONAL INSTITUTE OF STATISTICS</b>					

**Tourist accommodation capacity by types of tourist accommodation structures in Braila county / places**



**Figure 1. Tourist accommodation capacity by types of tourist accommodation structures in Braila county / places**

Braila County is among the counties with a small, in operation accommodation capacity. In the statistical data presented in the above table it can be noticed an increase in arrivals in hotels, insignificant compared to the number of arrivals in motels and villas that has skyrocketed.



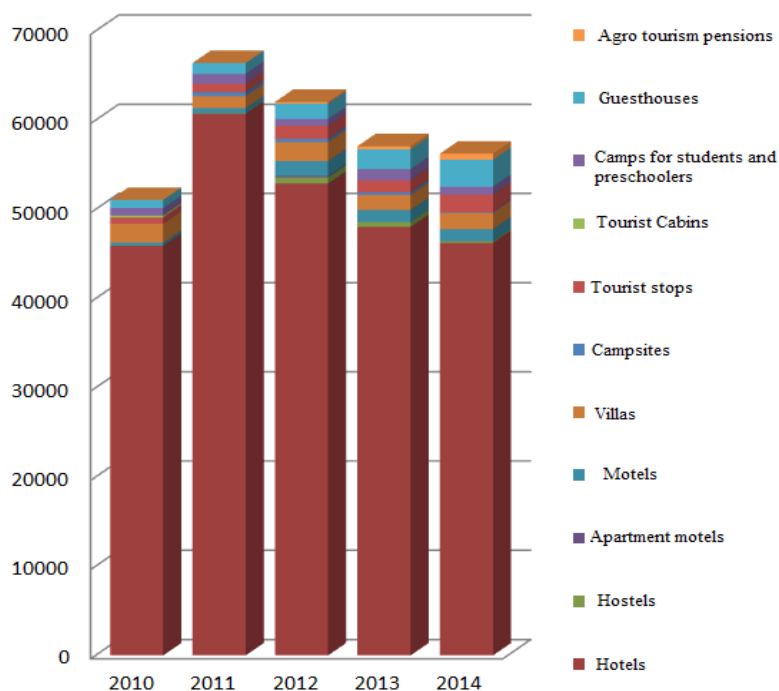
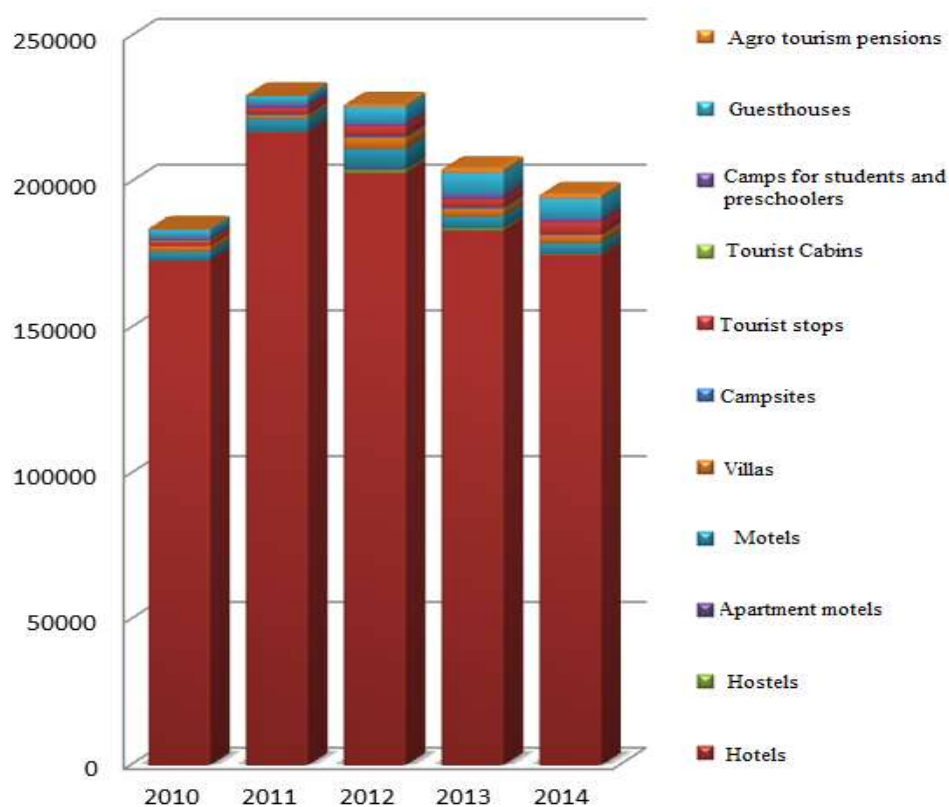


Figure 2. Arrivals of tourists in the structures of tourists' reception by type of establishment, in Braila County / No. of tourists

Table 3. Overnight stays in tourist accommodation by type of establishment in Braila county / number

Overnight stays in tourist accommodation by type of establishment in Braila county / number					
	Year 2010	Year 2011	Year 2012	Year 2013	Year 2014
<b>Total</b>	183821	229613	226689	204760	195944
<b>Hotels</b>	173237	217234	203172	183544	175174
<b>Hostels</b>	:	93	1146	730	250
<b>Apartment motels</b>	:	:	625	:	:
<b>Motels</b>	2867	4280	6489	4005	3625
<b>Villas</b>	2118	1368	3841	2636	2823
<b>Campsites</b>	:	490	495	498	202
<b>Tourist stops</b>	1446	1955	3546	2795	4367
<b>Tourist Cabins</b>	284	14	:	:	:
<b>Camps for students and</b>	1315	1616	1142	1804	1242

<b>preschoolers</b>					
<b>Guesthouses</b>	2554	2563	5347	7315	6753
<b>Agro tourism pensions</b>	:	:	886	1433	1508
<b>© 1998 - 2015 NATIONAL INSTITUTE OF STATISTICS</b>					



**Figure 3. Overnight stays in tourist accommodation by type of establishment in Braila county / number**

Also in the case of overnight stays it is kept the same trend, a growth in the first part of the analyzed interval and a slight decline in the final period.

## Conclusion

The special nature of the environmental framework representative for Braila is necessary to protect and preserve, but also to be known, becoming an important pole in terms of tourism and functionality intensely frequented by either county residents, visitors or tourists.

Braila's diverse tourism potential of the area should be popularized and promoted, not only nationally, but also internationally, the foreign tourism market could be a significant source of potential tourists, especially for balneary tourism. But in order to boost this tourism demand it is vital to make known the tourism offer. A special emphasis should be on the most current ways of promoting tourism services area both nationally and internationally, the Internet is a priority in this regard by making tourism sites more attractive for the inclusion of Braila area in the international tourist flows.

Another major objective in order to increase the capitalization of tourism resources in the region should be diversifying the leisure possibility.

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