Business Administration and Business Economics

Performance and Job Satisfaction: A Critical Analysis

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Abstract: The human aspect in the present context has acquired immense importance. The need based motivational theories relate need and psychological gratification to motivation and job satisfaction; they consider performance as the end result. However, Lawler and Porter postulate reversely that job performance leads to job satisfaction. The study focuses on testing the degree and direction of the relationship between Performance and Job Satisfaction with intervening variables such as job relations, commitment, role conflict, value system, motivation and organizational climate and with socio-economic variables. The study is conducted on 928 employees drawn from 13 public sector and 5 private sector organizations using simple random sampling and males as the matching sample in the State of Andhra Pradesh, India. It is evident from the study that the performance level of the employees is significantly lesser than their job satisfaction level. The analysis leads to state that all those performing well are satisfied and all those satisfied do not perform well indicating that performance leads to job satisfaction, job satisfaction does not lead necessarily to performance and the relationship is intertwined. This empirical evidence supports the theory of Lawler and Porter and sets direction for future studies at micro level.

Keywords: Motivation; Job Relations; Commitment; Value System

JEL Classification: J28

1. Introduction

Industrial societies are dynamic affected by fast and continuous changes with the advent of globalization and the new economic policy. These societies are treated as 'global village' and industrial units have been transforming into integrated learning organizations like 'spider plants' with team based structures practicing total quality management, flexibility and just- in- time techniques with continuous improvement (Colenso, 2002). The performance is a buzzword and the entire organizational system clusters around it with strategic integration as 'the survival of the fittest and be the best' is the operating business principle for competitive advantage (Bratton

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and Gold, 1994). Consequently, the role changes are imminent in both the male and female employees due to new technology and work design (Gratton, et. al., 1999). It is proved that machines cannot replace people (Cave, 1994). The continuous improvement in organizational systems is attempted by humans aiming at humans. Thus the human aspect has become the most key factor in the organizational systems to be cared as a glass case aiming at employees' motivation, job satisfaction, commitment and performance to achieve organizational effectiveness which is the multiplied effect of productivity and social health of the organization (Korman, 1977). It is said that work behavior is guided by motivation, will and ability are the factors that interact to yield motivation and motivation then interacts with ability to yield high performance. The relationship between motivation and performance is explained diagrammatically figure number 1.

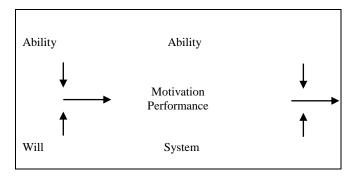


Figure 1. Relationship between Motivation and Performance

2. Literature Review

The motivational theories examined by Maslow (Maslow, 1954), Herzberg (Pareek Udai, 1974), Vroom (Vroom, 1964), Alderfer (Aswathappa, 2002) and Hackman (Beck, 2003) relate need gratification to motivation and job satisfaction and they consider performance as the end result. However, Lawler and Porter (Beck, 2003) postulate reversely that job performance leads to job satisfaction (Refer Figure 2).

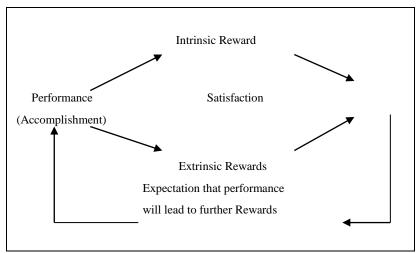


Figure 2. The Lawler and Porter Model

Some empirical studies by Dr Dennis Rose (2004), Vicente Gonzalez-Roma, Lina Fortes-Ferreira and Jose M. Peiro (2009) find a very strong link between Organizational Climate and employee reactions such as performance, job satisfaction, absenteeism commitment and participation. Judge and others (2001) and Sharon K. Parker (2007) find that employees' satisfaction affects their job performance. CelioAA Sousa, Willem F de Nijs, Paul HJ Hendricks (2010) examine performance systems in Universities and concluded role ambivalence as the critical factor for Job Satisfaction influence on Performance. The innovation plays a mediator role in the linkage between climate, Job Satisfaction and Performance (King, De Chermont, West, Dawson & Hebl, 2007). HRM policies and practices induce cognitive responses with consequences on behavior and in turn on performance outcomes viz. job satisfaction (Agarwal, Bose, Sundeeoa 2004). Some models have received more support than the others and research has not provided conclusive confirmation or discontinuation of any model.

Hence these theoretical postulates, which are unresolved, are re-examined and the study focuses on testing the degree and direction of the relationship between Performance and Job Satisfaction with intervening variables such as job relations, commitment, role conflict, value system, motivation and organizational climate and with socio-economic variables such as salary, age, gender, caste, education and job experience. The study is presented in three steps. First, Performance as dependent variable and its interrelation with other intervening variables, Second, Job Satisfaction and its interrelation with other intervening variables and Third, interrelationships between Performance and Job Satisfaction.

3. Methodology

As the main aim of our research study is the analysis of 'Behavioral dimensions of Women at Work' in comparison with the males, performance and job satisfaction form components and the manufacturing and service sector is treated as the frames of reference. All the women and men employees of the manufacturing sector working in the state of Andhra Pradesh constitute the universe. And some specific groups such as software professionals, doctors and teachers are also included from the service sector for the purpose of comparing the professions. The simple random procedure was adopted for drawing the sample with representation for both men and women; further care has been taken to cover all levels in the hierarchy. The sample drawn from the above universe constitutes 928 employees of which 570 are the females and 358 are the males who belong to 13 public sector and 5 private sector organizations. The analysis is done based on percentages, weighted means, and multiple regressions.

The validity and reliability of the questionnaire is pretested on a sample through a pilot study on a sample of 100 and some standard questionnaires are consulted (Siha, Jai, 1990) were used in Likert 5 point scale format. A questionnaire construct with 31 items on Organizational Climate,15 items on Commitment, 19 items on Job Satisfaction, 12 items on Performance, 6 items on Role Conflict, and 19 items on Values is administered to collect the necessary data. The questionnaire is distributed to 1500 sample and the response rate is 61.87 % which is considered as reasonable.

Data collection at macro level, low employment of females in the private sector and lack of authenticated data on female employment are the limitations in this study.

4. Data Analysis

The descriptive statistics show mean age of females (x: 35.23 years) and males (x: 39.03) as significant. The mean age difference of females (x: 39.21) and males (x: 40.07) in the public sector is also significant. However, the mean ages difference of males (x: 30.48) and females (x: 29.35) in private sector is very low. The table 8 shows the level wise, gender wise and sector wise distribution of the sample.

4.1 Performance

Organizations have been utilizing control mechanisms to maintain and improve performance since the inception of the industrial society. However, present day trends show that managements shift from control approach that involves concentration only on work techniques to developmental approach, a strategy harnessing the potential of all the employees, a shift towards streamlining of

attitudes, values and beliefs leading to commitment and performance. The performance of work task is treated as a relationship between means and ends as shown below in figure 3. (Beck, 2003)

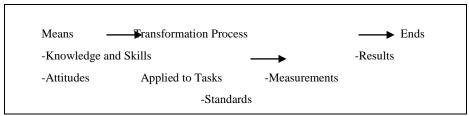


Figure 3. Relationship between Means and Ends

As to how the employee has applied his aptitude and attitudes to a task under the influence of time and place, machinery, superiors, peers, subordinates and customers would affect the performance process that results in outcomes of behavior and integration with organizational efficiency and goals and its assessment forms basis for further development. If the employee feels ease within the transformation process it leads to developmental adjustments and his career progression.

In this study, performance level of the employees is assessed from their perception towards their job knowledge, punctuality, and achievement of organizational objectives, effectiveness in planning and achieving targets, decision-making power, and discipline and inters dependability in work.

The data on job performance level (Table 1) indicate that on average it is to an extent of 3.14 (x). The female-male perceptional difference towards performance is marginal (females x: 3.13, males x: 3.16; t: 0.88). Sector-wise information also shows no variation between the males and the females. However, the females of the private sector perform better (x: 3.18) than the public sector females (x: 3.09) and the difference is significant (t: 2.04). Position-wise analysis indicates that only in case of junior managers the difference is significant in between the public and private sectors (public sector, x: 3.11; private sector, x: 3.26; t: 2.17).

When multiple regression is measured, performance as dependent variable and the organizational factors as independent variables, it is evident that commitment (t:2.145), job satisfaction (t:3.934), role conflict (t:2.780), value system (t:3.232) and motivation (t:2.685) seem to have positive impact on performance while job relations (t:-1.821) and organizational climate (t:1.436) have no significant impact (Table 2). The power of equation is: 0.126.

The effect of socio-economic variables (Table 3) on job performance through multiple regression model reveals that salary (t:3.052) has positive impact confirming that higher salary level is associated with higher performance and caste

(t:-3.194) has negative impact implying that lower performance is associated with reserved caste groups. Other variables are found to be not significant.

4.2 Job Satisfaction

Job satisfaction is a set of favorable and unfavorable emotional feelings with which an employee views his work and organization. It depends on actual experience of an employee at work and values or desires that employee brings to the work place.

Motivation and job satisfaction may be said as inter-related individual and organizational constructs. While motivation is expending effort to satisfy a goal, job satisfaction refers to gratification of need in a state of contentment. Motivation is treated as a drive to achieve job satisfaction, which is the outcome. It may be said that motivation leads to job satisfaction.

Job satisfaction theoretically is referred to the attitudes of single employee and in practice the research studies focus on the aggregate feelings of the employees to measure their satisfaction. The aspects of job satisfaction are job content factors such as pay and nature of job and job context factors such as superior-peer-subordinate relationships, human resource management and work climate. Job satisfaction is a dynamic phenomenon that emerges out of the employees' reaction to organizational processes and has spill-over effect on life satisfaction. It is also expected that when employees grow older their level of job satisfaction may decrease as promotions are less frequent and they would be under the influence of realities of retirement.

The empirical studies on job satisfaction indicate that gender and overall work satisfaction are unrelated (Mahopadhyay, 1980); age and designation have positive influence on job satisfaction while education has negative impact (Glenn, N. *et. al.*, April, 1977). Hammer (1978) reports that union membership is associated with more job satisfaction.

In this study, the employee satisfaction in job is measured from the perception of the employees towards job factors such as job nature, amount of variety in work, opportunities for using skills and abilities, opportunities for up-gradation of skills and promotion, recognition for work, opportunities for participation, responsibilities and authority in work, pay, work design, security in job, evaluation procedures, subordinate-peer-superior relations, management policies, facilities at work, retirement benefits and etc.

The data on job satisfaction (Table 4) indicate that the employees have job satisfaction to the extent of 3.54 (x) which is moderate and higher than the performance level. The difference is significant (t: 82.54 at one per cent level). The females express that they are slightly more satisfied (x: 3.56) than the males(x: 3.50) but the difference is not significant (t: 1.62). While the private sector employees (x: 3.61) are significantly more satisfied (t: 2.63) than the public sector

employees (x: 3.51), sex wise differences are not noticed. However, the female group of private sector (x: 3.64) is significantly more satisfied (t: 2.53) than the female group of the public sector (x: 3.52). Multiple regression analysis about impact of organizational variables on job satisfaction (Table 5) indicates that commitment (t: 10.022), performance (t: 3.934) and motivation (t: 11.06) have significant positive impact on job satisfaction while role conflict (t: - 3.143) shows significant negative influence when regressed with job satisfaction. The power of equation is 0.606.

When socio-economic variables are regressed with job satisfaction (Table 6) it is confirmed that salary (t: 3.634), age (t: 4.182) have significant positive influence while job experience (t: - 4.134) has negative impact on job satisfaction. The gender, caste and education reveal no influence on job satisfaction. The unionization is found to have no impact on job satisfaction, (R-2: 0.001 and t: 1.083).

4.3 Performance and Job Satisfaction

Under the theoretical postulates of Maslow, Herzberg, Vroom, Alderfer, Hackman and Lawler the linkages between performance and job satisfaction is examined. It is said that the aggregate effect of ability and will is motivation, and the ability is related to performance while will is to job satisfaction. The dilemma whether performance leads to job satisfaction or job satisfaction leads to performance is unresolved and controversial. When this relationship is assessed, the data under the study (Table 7) reveal that just majority of the employees (50.86%), more females (56.67%) than the males (41.62%) express that performance and job satisfaction are inextricably intertwined and interdependent. This trend is clear in females (56.67%) while in males highest proportion (41.62%) are for this new postulate and others are divided between other two earlier theoretical propositions of performance and job satisfaction. Sector-wise, while private sector shows clear trend to the new postulate of intertwined nature of performance and job satisfaction (54.85%), the highest proportion of the public sector employees (48.97%) also subscribe to the new idea of interdependency of performance and job satisfaction indicating the overall acceptance of the new proposition. The weighted average also indicates that all those who perform well are satisfied but all those satisfied do not perform well. The implication is that job performance always leads to job satisfaction and job satisfaction does not lead necessarily to performance.

5 Conclusion

The performance level of the employees (x: 3.14) is significantly lesser than their job satisfaction level (x: 3.54). It is true in case of both the females (performance, x: 3.12 and job satisfaction, x: 3.56) and the males (performance, x: 3.16 and the

job satisfaction, x: 3.50). The analysis leads to state that all those performing well are satisfied and all those satisfied do not perform well indicating that performance leads to job satisfaction and job satisfaction does not lead necessarily to performance. This empirical evidence supports the theory of Lawler and Porter. While in case of performance, job commitment, job satisfaction, role conflict, value system, and motivation indicate significant positive influence, in case of job satisfaction, commitment, performance, motivation have significant positive impact but role conflict has significant negative influence. These results indicate that the employees manage role conflict in relation to performance but not in case of job satisfaction. The effects of socio-economic variables indicate that in case of performance, salary has significant positive influence and reserved caste groups show lesser performance and it is an indication to organizations to introduce special measures to maintain performance of reserved categories. In case of job satisfaction, while salary and age show significant positive impact, the experienced employees are significantly less satisfied indicating their state of frustration. Moreover, the highly experienced employees are critical of the organizational systems which indicate that their potential is not best utilized by the organizations. Gender is found to have no influence either on performance or job satisfaction.

The impact of organizational climate, work design and other group factors like job commitment are found to be significantly influencing factors on performance and job satisfaction. Interestingly, employees (50.86%) agree that the performance and job satisfaction act in continuous cyclical process directing the organizations to concentrate both on individual factors such as motivation and commitment and group factors such as work design and organizational climate involving job relations, human resource management and industrial relations. The effect of unionism is neutral, supporting the "unitary approach" which is now adopted by the contemporary organizations. The individual psychological factors relating to motivation and quality of work life enhance both performance and job satisfaction to an optimum level for achieving organizational effectiveness. Finally, it is evident that the highest concentration on performance improvement is necessary to maintain the organizational climate. Some future studies are required at the micro level to assess the strength of relationship.

6. References

Agarwal, M. & Bose, Sudeepa (2004). Organizational climate for perceptions of procedural "fairness" in human resource practices and role efficacy. *Indian Journal of Industrial Relations*, (1), October.

Aswathappa, K. (2002). *Human Resource and Personnel Management*. New Delhi: Tata McGraw-Hill Publishing Company Ltd.

Beck, Robert, C. (2003). Motivation. Delhi: Pearson Education Inc.

Bratton, J. & G.J. (1994). *Human Resources Management*. London: Macmillan Press Limited. 12

Cave, A. (1994). Managing Change in the Workplace. London: Kogan Page Limited.

Céli AA Sousa, Willem F de Nijs, Paul, H. J., Hendriks (2010). Secrets of the beehive: Performance management in university research organizations. Human Relations 63(9), 1439-1460, September.

Colenso, M. (2002). Kaizen Strategies for Successful Organizational Change. Delhi: Pearson Education Limited.

Cotton, J.L., Vollrath, D.A., Froggatt, K.L., Lengnick-Hall, M.L., & Jennings, K.R. (1988). Employee participation: Diverse forms and different outcomes. *Academy of Management Review 13*, 8-22.

Glenn N et. al. (1977). Age and Job Satisfaction among Males and Females - A Multivariate Study. *Journal of Applied Psychology*, 189-193, April.

González-Romá, V., Fortes-Ferreira, L. & Peiró, J.M. (2009). Team climate, climate strength and team performance. A longitudinal study. *Journal of Occupational and Organizational Psychology*, 82, 3, 511–536, September.

Gratton, L. et.al. (1999). Strategic Human Resource Management. New York: Oxford University Press.

Hammer, (1978). Relationships between Local Union Characteristics and Worker Behavior and Attitudes. *Academy of Management, Journal*, 21, 4.

Judge, Timothy, A., Thoresen, Carl J., Bono, Joyce, E. & Patton, Gregory, K. (2001). The job satisfaction–job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, 127(3), 376-407, May.

King, E.B., De Chermont, K., West M, Dawson, J.F. & Hebl, M.R. (2007). How innovation can alleviate negative consequences of demanding work contexts: The influence of climate for innovation on organizational outcomes. *Journal of Occupational and Organizational Psychology*, 631–645, December.

Korman, A. K. (1977). Organizational Behavior. New Delhi: Prentice Hall of India Private Limited.

Mahopadhyay S (1980). Working Women in India: A case of Market Segmentation in Women in the Indian Labor Force. Bangkok: ARTEP.

Maslow, A.H. (1954). Motivation and Personality. New York: Harper and Row.

Pareek, Udai (1974). A Conceptual Model of Work Motivation. Indian *Journal of Industrial Relations*, 10, 15-31.

Sinha, J.B.P. (1990). Work Culture in the Indian Context. New Delhi: Sage Publications.

Sharon, K., Parker (2007). That is my job' How employees' role orientation affects their job performance. *Human Relations*, 60, 3, 403-434.

Vroom, V. (1964). Work and Motivation. New York: Wiley.

Table 1. Mean Analysis (x) of Job Performance

Job Position	Pu	ıblic Se	ctor	Private Sector		Total Males	Total Females	Total Emplo- yees	
	M	F	Total	M	F	Total	M	F	Total
1. Senior Manager	3.31	3.49	3.42	3.25	3.23	3.24	3.28	3.39	3.35
2. Middle Manager	3.33	3.23	3.28	3.28	3.23	3.23	3.22	3.22	3.26
3. Junior Manager	3.06	3.16	3.11	3.39	3.24	3.26	3.09	3.20	3.16
4. Supervisor	3.23	3.05	3.13	2.91	2.79	2.86	3.18	3.03	3.10
5. Worker	3.13	3.10	3.11	3.03	3.10	3.08	3.09	3.10	3.09
6. Clerical Staff	3.10	3.00	3.03	3.19	0	3.19	3.12	3.00	3.04
7. Doctors, Nurses, Teachers	3.09	2.99	3.03	3.12	3.28	3.23	3.10	3.09	3.09
8. Total	3.16	3.09	3.12	3.15	3.18	3.17	3.16	3.13	3.14

Note: M- Male F-Female

Table 2. Multiple Regression Results: Impact of Organizational Variables on Performance

S. No.	Independent variable	Regression	t – value
		coefficient	
1.	Job relations	-0.197	-1.821
2.	Commitment	0.083	2.145**
3.	Job satisfaction	0.106	3.934*
4.	Role conflict	0.152	2.780*
5.	Value system	0.058	3.232*
6.	Motivation	0.097	2.685*
7.	Organizational climate	-0.048	-1.436

Intercept: 18.596; R²: 0.126; F: 20.158 * Significant at 1% level ** Significant at 5% level

Table 3. Regression Results: Impact of Socio – Economic Variables on Performance

S. No.	Independent variable	Regression coefficient	t – value
1.	Salary	0.429	3.052*
2.	Age	-0.085	-0.630
3.	Gender	-0.437	-1.004
4.	Caste	-1.043	-3.194*
5.	Education	-0.198	-0.561
6.	Job experience	0.281	1.446

Table 4. Mean Analysis of Job Satisfaction

Job position	Publi	c sector		Priva	te secto	r	Total Male	Total Fem-	Total Emplo-
Job position	M	F	Total	M	F	Total	S	ales	yees
1. Senior Manager	3.70	3.77	3.74	3.93	3.62	3.78	3.82	3.72	3.76
2. Middle Manager	3.48	3.61	3.54	3.84	3.71	3.73	3.54	3.66	3.61
3. Junior Manager	3.46	3.41	3.43	3.71	3.86	3.84	3.48	3.62	3.57
4.Supervisor	3.57	3.57	3.56	3.59	3.08	3.40	3.57	3.53	3.55
5. Worker	3.57	3.65	3.61	3.24	3.43	3.39	3.44	3.49	3.48
6. Clerical Staff	3.42	3.47	3.45	3.87	0	3.87	3.49	3.47	3.48
7. Doctors, Nurses, Teachers etc.	3.51	3.51	3.51	3.02	3.66	3.47	3.39	3.56	3.50
8. Total	3.49	3.52	3.51	3.53	3.64	3.61	3.50	3.56	3.54

Note: M-Males F-Females

Intercept: 82.433; R²: 0.026; F: 4.463 * Significant at 1% level, ** Significant at 5% level

Table 5. Multiple regression Results of Organizational Factors on Job Satisfaction

S. No.	Independent variable	Regression coefficient	t – value	
1.	Job relations	0.055	0.420	
2.	Commitment	0.045	10.022*	
3.	Performance	0.156	3.934*	
4.	Role conflict	-0.208	-3.143*	
5.	Value system	0.016	0.727	
6.	Motivation	0.457	11.061*	
7.	Organizational climate	-0.046	-1.127	

Intercept: 1.788; R²: 0.606; F: 204.48

Table 6. Multiple regression Results: Impact of Socio – Economic variables on Job Satisfaction

S. No.	Independent variable	Regression coefficient	t – value
1.	Salary	0.896	3.634*
2.	Age	0.986	4.182*
3.	Gender	0.814	1.067
4.	Caste	0.281	0.491
5.	Education	0.434	0.702
6.	Job experience	1.410	-4.134*

Intercept: -19.023; R²: 0.053; F: 8.136

Table 7. Relationship between Performance and Job Satisfaction

Nature of	Public	sector		Private	esector		Total	Total	Total
Influence	M	F	Total	M	F	Total	Males	Fem- ales	Emp- loyees
1. Your per- formance is due to your job satis- faction	62 21.45	48 14.12	110 17.49	16 23.19	24 10.43	40 13.38	78 21.79	72 12.63	150 16.16
2. Your job satisfaction is due to your performance	81 28.03	96 28.24	177 28.14	21 30.43	41 17.83	62 20.74	102 28.49	137 24.04	239 25.75
3. Both	129 44.64	179 52.65	308 48.97	20 28.99	144 62.61	164 54.85	149 41.62	323 56.67	472 50.86
4. No answer	17 5.88	17 5.00	34 5.41	12 17.39	21 9.13	33 11.04	29 8.10	38 6.67	67 7.22
5. Total	289 100	340 100	629 100	69 100	230 100	299 100	358 100	570 100	928 100

Note: M – Male F-Female

^{*} Significant at 1% level, ** Significant at 5% level

^{*} Significant at 1% level, **: Significant at 5% level

^{*} Figures in decimals are percentages

Table 8. Distribution of the Sample (Percentages are given immediately after actual)

Job position	Males			Female	s				
•	Private Sector	Public Sector	Total Males	Private Sector	Public Sector	Total Femal es	A	В	С
Senior	4	4	8	4	7	11	8	11	19
manager	5.80	1.38	2.23	1.74	2.06	1.93	2.68	1.75	2.05
Middle	11	57	68	52	46	98	63	103	166
Manager	15.94	19.72	18.99	22.61	13.53	17.19	21.07	16.38	17.89
Junior	9	79	88	72	80	152	81	159	240
Manager	13.04	27.34	24.58	31.30	23.53	26.67	27.09	25.28	25.86
Supervi- sory Staff	7 10.14	45 15.57	52 14.53	4 1.74	45 13.24	49 8.60	11 3.68	90 14.31	101 10.88
Worker	22	34	56	81	34	115	103	68	171
	31.88	11.76	15.64	35.22	10.00	20.18	34.45	10.81	18.43
Clerical	9	47	56	0.00	94	94	9	141	150
Staff	13.04	16.26	15.64		27.67	16.49	3.01	22.42	16.16
Others	7	23	30	17	34	51	24	57	81
	10.14	7.96	8.38	7.39	10.00	8.95	8.03	9.06	8.73
Total	69	289	358	230	340	570	299	629	928
	100	100	100	100	100	100	100	100	100

A: Total Private Sector Employees B: Total Public Sector Employees

C: Total Employees
Others: Doctors, Paramedical Staff

Identifying the Reducing Resistance to Change Phase in an Organizational Change Model

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Abstract: In this article we examine where in an organizational change process it is better to place the reducing resistance to change phase, so that employees would accept the new changes easier and not manifest too much resistance. After analyzing twelve organizational change models we have concluded that the place of the reducing resistance to change phase in an organizational change process is not the same, it being modified according to the type of change. The results of this study are helpful for researchers, but especially for organizational change leaders. As change leaders are usually the ones confronted with resistance from their subordinates, they must know exactly how to deal with it and when is the best moment to reduce it, depending on the type of change that is desired to be implemented. The key contribution to this paper is that the best way to gain employee's support and change attachment is to try and reduce resistance to change before the actual implementation. Only when an immediate or imposed change is required to be implemented, the methods and ways for overcoming resistance should be applied during and after the implementation stage, to ensure a successful implementation of the change.

Keywords: resistance to change; organizational change model; change leaders; communication; involvement.

JEL Classification: O30; O39

1. Introduction

Changes are necessary for those organizations that want to survive and improve their performance. More recently, global environmental, technological and financial shocks have forced organizations to adapt and transform their activities (Bennebroek Gravenhorst & In't Veld, 2004; Becovitz & Feldman, 2008). And of course, these transformations have been met with resistance from the employees. For many change leaders, resistance to change represents a big problem, something that needs to be overcome, an assumption which continues to be popular today. (Furst & Cable, 2008; Harvard Bussines School, 2005) Resistance to organizational change is an inevitable phenomenon, because people are asked to reexamine and modify their behavior, which breeds resistance.

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To ensure a successful change implementation, managers and change leaders must effectively overcome their subordinates resistance to change (Agboola & Salawu, 2011; Burnes, 2004; Kotter, 1996; Predişcan, 2004). Overcoming resistance to change is not an easy job, especially when over the years, employees have formed certain habits.

Even if the goal of each organizational change process is represented by the transition from the current state, considered to be unsatisfactory, to a future desired state, the process itself differs from one author to another. The starting point in developing all the organizational change models is represented by Kurt Lewin's work, especially his three step change model (Kanter et al., 1992; Griffin, 2008).

In this paper we aimed to identify the place where the reducing resistance to change phase should be located in an organizational change process, so that employees could accept the change easier, without manifesting too much resistance. If people know why things are changing, they are more willing to join the process (Ford &Ford, 2010).

We have analyzed twelve organizational change models and concluded that the phase of reducing resistance to change is either present, either absent or it can be inferred from the other stages that are present in the model. Also, the place of the reducing resistance to change phase in an organizational change process differs, according to the type of change which is desired to be implemented.

Further research could identify the reason why only two of the twelve organizational change models contain the actual phase of reducing resistance to change and why the other authors did not consider important to include it in their models.

2. The Reducing Resistance to Change Phase according to the Type of Change

The place of the reducing resistance to change phase in an organizational change process is not the same, it being modified according to the type of change. Even if the goal of each organizational change process is represented by the transition from the current state, considered to be unsatisfactory, to a future desired state, the process itself differs from one change to another. According to the change that is desired to be implemented, employees resistance will vary too (Predişcan, 2004).

There are several types of organizational change and to identify and highlight the place of the reducing resistance to change phase, we will refer to some of them.

It is known that employees are more willing to provide support for implementing a new change when it is planned, incremental, participatory and bottom up. The organizations personnel participates more actively in the change process when they have the feeling that are part of the process and contribute to decision making. Accordingly, employees will accept more enthusiastically the change decision if it has been suggested by them.

For the above mentioned types of change, the phase of reducing resistance to change is recommended to be placed before the actual implementation stage. The change decision needs to be communicated by the executive managers in advance, so that employees would have enough time to adapt to the new conditions and acquire the necessary skills. This positioning of the reducing resistance to change stage in an organizational change process is recommended, as to implement successfully a new change, the support and involvement of each member of the organization is essential. Employees need to be informed in advance about what will take place and "feel" that are part of the planning process since the beginning.

Although most of the changes that are implemented in an organization are planned, there are cases where the need for change is sudden (Predişcan, 2004). Depending on the economic environment, the management of an organization may decide to implement urgent and immediate changes, which may influence the future success of the organization.

The immediate changes, which necessity appears "over night", usually are unplanned, imposed, top-down and in some cases radical. Employee reaction to this kind of change will certainly be very negative, the success of the implementation being attributed to managements capacity to communicate with and motivate employees properly. In such crisis situations, when an urgent and unplanned change is required to be implemented, the change agent has no alternative but to resort to immediate implementation of change. The question is: where is located the stage of reducing resistance to change?

Since the organization does not have enough time to inform and obtain employees support regarding the new changes before the implementation phase, I recommend doing this during the implementation phase and immediately after. Once the implementation phase is started, the resisting forces will appear and simultaneously with the advancement of the process, their manifestation will be increasingly emphasized. Clearly, most of the staff will be confused, with the morale down and even resentful, which is why the change leaders should act rapidly. For a successful implementation of the new change I recommend managers to communicate constantly with their subordinates and to involve them as soon as the process begins. The role of the change agent is also very important, the individual or the team, having to immediately introduce the phase of reducing resistance to change, otherwise, the success of the new change might be in danger. First, employees must be made aware of the reasons which lead to the sudden implementation of the change and secondly, the advantages employees will benefit from must be stressed.

Although Predişcan (2004) recommends the positioning of the reducing resistance to change phase immediately after the implementation phase, the utility of the first phase may not be the same if during the implementation the change agent has not communicated or informed employees about what was happening. If an imposed or immediate change has been successfully implemented, it is considered that the pro change forces managed to effectively constrain the resistant ones, with little chances for expression of resistance at the ending of the implementation.

3. Identifying the Phase of Reducing Resistance to Change in an Organizational Change Model

To locate the reducing resistance to change phase, we analyzed a few of the most representative change models found in the literature. Analyzing twelve organizational change models, we have concluded that the stage of reducing resistance to change is either present, absent altogether, or can be inferred through the proposed ways to reduce resistance to change.

In the next table a synthesis of organizational change models and the importance given to the reducing resistance to change phase is presented.

Reducing resistance to change phase is present	Reducing resistance to change phase is absent	Reducing resistance to change phase can be inferred
Predișcan change model	Kurt Lewin change model	Edgar Huse change model
John Sena change model	Moorhead – Griffin change model	Rosabeth Moss Kanter change model
	Beckhard and Harris change model	John Kotter change model
	Florescu – Popescu change model	Tichy and Devanna change model
		Nadler and Tushman change model
		Price Waterhouse Change Integration Team model

Table 1. Identifying the reducing resistance to change phase

From Table 1 we can easily observe that only two models of organizational change from those analyzed, respectively Prediscan change model and John Sena change model, have the phase of reducing resistance to change present. This phase is clearly defined and to ensure the success of the new changes, the authors placed it before the implementation stage. Before making a change, employees must be informed, educated and actively implicated in the process. They need to feel that

are part of the process and contribute with personal ideas. Usually, all that is new is associated either with a potential gain or a potential loss. Therefore, proper motivation and presentation of the advantages from which will benefit employees are primary. The main methods to reduce resistance to change recommended by John Sena are: patience, education and communication (Litch, 2005).

In Predişcan's change model, the second phase of the design stage is called reducing resistance to change. The author emphasizes this phase because, if people do not want to change and act according to the new standards, the new change is not likely to last. The main ways recommended for reducing resistance to change effectively are employee's information and motivation.

The main method recommended to reduce resistance to change is communication. An open communication between change leaders or change agents and the other members of the organization will always avoid any misunderstandings and will stimulate a much active participation from employees part. Rewarding employees efforts equals with motivation, which can be intrinsic or extrinsic.

An important aspect of Prediscan model is that, although the model applies to planned strategic changes, it can be adapted, as necessary, to implement urgent or imposed changes. In such cases, the author recommends the rapid identification of the type of change needed, the change implementation and then returning to that phase of reducing resistance to change. Returning to this phase is imperative, because if employees do not understand what, how and why it happened, they can sabotage the whole process, change being in vain.

In Lewin's, Moorhead – Griffin, Beckhard – Harris and Florescu – Popescu change models, the phase of reducing resistance to change has not been identified. The authors decided to omit this phase either because employees understand the need for change and willingly participate at the change process, or because they do not manifest too much resistance.

In the other six models respectively, Edgar Huse's model, Rosabeth Moss Kanter's model, John Kotter's model, Tichy – Devanna model, Nadler – Tushman model and Price Waterhouse Change Integration Team model, the phase of reducing resistance to change can be inferred through the methods and procedures presented in the models stages.

The planning stage of Edgar Huse's model involves, besides presenting the actions to be performed, the identification of resistance to change from emplyees part. Although the model does not include a stage intitled "reducing resistance to change", the author emphasizes its importance early in the planning stage. Employee's resistance to change is identified, a series of measures for overcoming resistance are recommended and only after, the new change is implemented.

In Kanter's model, the following three stages relate to reducing resistance to change:

- Line up political sponsorship, stage in which, for a change effort to succeed, all members of an organization must be involved in the organizational change process. Leadership alone cannot bring about large scale change, which is why a change effort must have broad based support throughout an organization.
- Develop enabling structures. In this stage enabling structures are designed
 to facilitate and spotlight change from the practical, training programs for
 employees, to the symbolic, rearranging the organization's physical space.
 Employees are empowered, but before that, they are send to trainings to
 gain the necessary knowledge. The effort reward is also very important,
 being it financial or non-financial.
- Communicate, involve people and be honest. As potent tools for overcoming resistance to change, the author recommends an open communication between change leaders and organizations personnel, an active involvement and disclosure. People accept a change more quickly when they are given all the information, know the advantages and disadvantages, and feel part of the process.

Indirectly, Kanter et al. (1992) recommend first reducing resistance to change and only after obtaining the support and involvement of employees, to resort to actual implementation.

Kotter (1996) also makes reference to the importance of reducing resistance to change, the ways recommended being identified in the following four stages:

- Form a powerful coalition, stage which implies identifying and attracting the key leaders of the change process and encouraging the team members to work together. These stages refer to a consensus building.
- Communicate the vision, the author describing the model as requiring multiple conversations. The vision should be frequently and powerfully communicated, embedded in everything the change leader does. Employees need to know exactly what is happening and how their actual situation will change.
- The empowering stage implies getting employees responsible, giving them both the authority to perform a task and the necessary knowledge and tools. It is considered that employees are less resistant if they have all the necessary information and are rewarded accordingly.
- Generating short-term wins refers to the fact that any gain, being it small or big, should be rewarded and communicated to the other members. Thus, people become more motivated to engage in the process, because their involvement will be associated with a potential gain.

A constant two-way communication and employee's empowerment represent two key ways to attract and involve staff in implementing a new change (Gerhard, 2004). Usually people are excited to participate in something new when they know exactly what will happen, how it will affect them and what benefits they will get. As long as employees feel that they have sufficient knowledge and control over the situation, resistance to change from their part might not be manifested.

As in the models mentioned above, the reducing resistance to change phase, which can be inferred from the four stages described, is located before the implementation stage. Kotter recommends to attract and involve personnel in the process before the actual institutionalization of the change.

The main methods and ways to reduce effectively resistance to change presented in the other models are: a constant and open communication between all members of the organization, employee's education and training, and an active implication. These methods are recommended to be applied before the actual implementation of the change.

4. Conclusions

The location of the reducing resistance to change stage in a process of organizational change varies from one organization to another, depending on the type of change which follows to be implemented. When a planned and strategic change is decided to be implemented, the reducing resistance to change stage will always be placed before the implementation stage. However, in extreme situations, when introducing a new change is urgent and immediate, first the change will be implemented and after, the change leaders have to return to the reducing resistance to change phase.

Not all of the organizational change models analysed present as being necessary to go through a reducing resistance to change phase. However, authors of the most models recommend that the reducing resistance to change phase should be located before the implementation stage.

Reducing resistance to change is a difficult phase because over the years, employees form certain skills and habits. But, overcoming employee's resistance is possible, if change leaders know how to act efficiently and remove all the barriers. Once employees will be notified of the advantages of the new change, many of them will become more open and willing to participate in the process. To ensure success of the new implementation, it is important that employees understand the need for change and engage actively in the process. The role of the executive management in this stage is also essential.

The present period, characterized by a dwindling economic crisis, has contributed greatly to the change of employee's behavior. Organizations benefit from more and more adaptable and "open" to new challenges employees, change becoming a norm. Those who can cope with it remain in the organization, while others leave.

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6. References

Agboola, A. A. & Salawu, R. O. (2011). Managing deviant behavior and resistance to change, *International Journal of Business and Management*, vol. 6, No. 1.

Beckhard, R. & Harris, R. (1977), Organizational transitions: managing complex change. Addison-Wesley, Reading, MA.

Bennebroek Gravenhorst, K. M. & In't Veld, R. J. (2004). *Power and collaboration: Methodologies for working togheter in a change*. Chichester: Willey.

Burnes, B. (2004). Managing change. 4th edition. Essex: Pearson Education Limited.

By, R. T. (2007). Ready or not. Journal of Change Management. 7(1), pp. 3-11.

Dent, E. B. & Galloway Goldberg, S. (1999). Challenging "Resistance to change". *The Journal of Applied Behavioral Science*, pp. 25.

Florescu, C. & Popescu, N. (1987). Trecerea la o nouă calitate prin conducerea științifică a schimbărilor/Switching to a new quality by Scientific Management of Changes. Bucharest: Politică.

Ford, J. D. & Ford, L. W. (2010). Stop blaming resistance to change and start using it. *Organizational Dynamics*, Vol. 39, No.1, pp. 24-36.

Furst, S. A. & Cable, D. M. (2008). Reducing employee resistance to organizational change: Managerial influence tactics and leadermember exchange. *Journal of Applied Psychology*, No. 93.

Gerhard P. L. (2004). Organizational Change: a comparison of four of the best models of all time. Paris.

Graetz, F., Rimmer, M., Lawrence, A. & Smith, A. (2006). *Managing organizational change*, 2nd edition, Australia: Wiley and Sons.

Griffin, R. W. (2008). Management. 9th edition. Houghton Mifflin Company.

Harvard Business School Press (2005). Managing change to reduce resistance. Business & Economics.

Kanter, R.M., Stein, B.A. & Jick Tood, D. (1992). *The challenge of organizational change*. New York: Free Press.

Kee, J.E. & Newcomer, Kathryn E. (2008). Why Do Change Efforts Fail. *Public Manager*, Vol. 37, Iss. 3, pp. 5-12.

Kotter, J. P. (1996). Leading change. Boston: Harvard Business School Press.

Litch, B.(2005). Facing Change in an Organization: How to Chart Your Way through the Chaos. *Healthcare Executive*, Vol. 20, Iss. 5, pp. 20-24.

Moorhead, G. & Griffin, R. (2009). Organizational Behavior, 9th edition. Boston: Houghon Miflinn.

Năstase, M. (2004). Cultură organizațională și cultură managerială/Organizational culture and management culture. Bucharest: ASE.

Predişcan Mariana, Săcui Violeta (2011). Opportunity to reduce resistance to change in a process of organizational change. *Annals of the University of Oradea: Economic Science*, Vol. 1, Issue 2, p. 698-702.

Predişcan, M. (2004). Schimbare organizaţională: ce, când şi cum să schimbăm/Organizational change: what, when and how to change. Timisoara: Universitatea de Vest.

Rothwell, W. J., Stavros, Jacqueline, Sullivan, R. L. & Sullivan, A. (2009). *Practicing organization development: a guide for leading change*, 3rd edition. Wiley: John&Sons Incorporated.

The Price Waterhouse change integration team (1995). Better Change: best practices for transforming your organization. USA: IRWING Professional Publishing.

Thomas, R. & Hardy, C. (2011). Reframing resistance to organizational change. *Scandinavian Journal of Management*, No. 27, pp. 322-331.

Van Dijk, R. & Van Dick, R. (2009). Navigating organizational change: change leaders, employee resistance and work based identities. *Journal of Change Management*, vol. 9, No. 2, pp. 143-163.

Williams, C. (2010). *Management*. 6th edition. Cengage Learning, pp. 260-280.

Modelling the Causal Relationship between Seniority of the CEO in the Enterprise and the Debt in USA

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Abstract: This paper develops a model in which the interaction of Seniority of the C.E.O in the enterprise and the debt can be analyzed. Multiple securities arise as optimal in the model. This allows for a meaningful analysis of interaction effects between Seniority of the C.E.O in the enterprise and the debt for a panel of USA firms from 2000 to 2009. There is a predicted (positive) relationship between Seniority of the C.E.O in the enterprise and the debt. Finally, this paper uses the recent developments in the econometrics of non-stationary dynamic panels to reassess the relationship between Seniority of the C.E.O in the enterprise and the debt

Keywords: Seniority of the C.E.O; debt; cointegration; unit root; FMOLS

JEL Classification: G32

1. Introduction

The relationship between Seniority of the CEO in the enterprise and the debt is an important issue in the literature on corporate governance. One key aspect of the relationship between Seniority of the CEO and the debt is the direction of causality between them. The causal relationship between Seniority of the CEO and the debt has remained an empirically debatable issue in the field of finance, (i.e., Hart and Moore (1995), Berger, Ofek and Yermack (1997)). Over the Past three decades, a large number of studies have investigated the relationship between Seniority of the CEO and the debt. This is not surprising given the importance of the subject matter in finance; particularly the direction of causality has important implications for the entrenchment managerial. The focus of this paper is to examine the relationship between seniority of the CEO and the debt for a sample of 70 USA firms over the period of 2000-2009.

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We organize this paper as follows. Section 2 describes data collection. Section 3 describes methodology and empirical analysis. We conclude this paper in Section 4.

2. Data

Our initial sample consists of over 100 firms listed on the USA Stock Exchange. We select the firms based on the availability of annual reports. As has been the practice in previous studies. We have also removed firms with negative book equity values. After these filtering procedures, our final sample consists of 70 firms during the time period of 2000-2009. We hand-collect data on board attributes and ownership concentration of individual companies from their respective annual reports for the financial year ending in 1999 or 2000. The source for other control variables is from DataStream. The Seniority of CEO variable is defined as the number of years in the enterprise.

3. Methodology and Empirical Analysis

3.1. The Model Proposed and Definition of Variables

To investigate the relationship between Seniority of the CEO in the enterprise and the debt, we use the following model

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ANCI it = \beta_0 + \beta_1*L1 it+ \beta_2*L2it + \beta_3*TAILL it+ \beta_4*AG it+ \beta_5Qit + \beta_6*S it+ e it (1)
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Where:

ANCI: Seniority of the leader in his duties as C.E.O in the enterprise

L1 : Total debt in book value L2 : Total debt in market value

TAILL: Firm size **AG**: Firm age

Q : Opportunities of growth
S : Structure of asset
e : is the error term.

The equation is to be considered as long run, or equilibrium relation. We may, of course, have more cointegrating relations involving firm size or firm age or opportunities of growth or structure of asset as the dependent variable. Provided all variables involved are integrated of order one, or I (1), valid economic inferences can be drawn only if these relations are cointegrating relations, otherwise spurious inferences would result. Previous studies have examined cointegration on firm by firm basis by using time-series techniques, like Dickey-

Fuller tests, and Johansen's maximum likelihood cointegration methodology. However, given the short span of the data, we need to utilize information in the most efficient way, and make use of panel-based unit root and cointegration tests as well. In our empirical analysis, we will use pure time series tests and procedures as well, for comparison purposes.

Further analysis indicates that the relation between debt yields and the Seniority of C.E.O is not strictly linear but rather as the number of C.E.O years in the enterprise increases, debt costs decrease more rapidly. The evidence is consistent with the idea that large C.E.O Seniority positions reduce executive opportunism and generate incentives for greater managerial effort, However, to the extent that our control variables (e.g. firm size, firm age, structure of asset, etc.) do not fully capture credit risk, both the mitigation of agency problems and other factors inherent in debt pricing may contribute to the non-linear relation between CEO ownership and bond yields.

Our research contributes to the literature in two important ways. First, we document that Seniority of C.E.O influences the cost of debt financing; suggesting that bondholders view managerial equity stakes as an important element in debt pricing. To best of our knowledge, this is the first study that examines the relation between Seniority of C.E.O and the cost of debt financing. Second, we add to the growing literature on the effects of Seniority of C.E.O on corporate activity. Our evidence is generally consistent with the notion that managerial equity holdings are associated with reduced executive shirking and with greater managerial diligence.

Our study offers several contributions to the literature on the managerial entrenchment and corporate governance. We provide comprehensive sample evidence that debt and managerial entrenchment (the Seniority of C.E.O) are negatively related. This finding is contrary to the evidence presented in Garvey and Hanka (1999) and to several of the findings in (Berger et al., 1997). We also show that this increased use of debt by entrenched managers is higher with higher ownership by large shareholders. Second, we employ robust econometric estimation techniques and tests that are able to address the concerns of endogenous choice of governance and financial policy. Therefore, we then suggest the following hypothesis:

Hypothesis 1: the debt is positively associated with the Seniority of C.E.O

3.2. The Panel Unit Root and the Panel Cointegration Tests

The empirical results are presented in the following order. First, we examine the stationarity of the relevant series using panel unit root tests. Second, we explore whether there is any long-run relationship between Seniority of the CEO in the enterprise and the debt, using the panel co-integration technique. Third, we test the

validity of the absolute LOP using the FMOLS estimator. Finally, we investigate whether the long-run relationship varies with industry characteristics, such as the degree of product differentiation and market integration

3.2.1. Panel Unit-Root Tests

In recent years, a number of investigators, notably Levin, Lin and Chu (2002), and Im, Pesaran an Shin (2003) have developed panel-based unit root tests that are similar to tests carried out on a single series.

In this section, the estimation results obtained from panel unit root tests and the equation (1) which shows the relationship between of the Seniority of C.E.O and the debt. Table 1.1 and Table 1.2 provide panel unit root tests results for investment and saving variables respectively. In the first Table, the LLC panel unit root tests are given. While the second table provides the IPS panel unit root test results. However, the first differences of these variables are stationary under the test. Hence, we conclude that these six variables are integrated of order 1 or I (1).

ANCI L2 Taill AG L1 0 Statistique 2.734 -1.603 -2,608 2.130 3,609 -4,721 -0,255Levin-Lin ADFstat

Table 1.1. Results of panel unit root test (LLC test)

Table 1.2. Results of panel unit root test (IPS test)	Table 1.2.	Results of	panel unit	root test	(IPS test)
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Statistique	ANCI	L1	L2	Taill	AG	Q	S
IPS ADF-stat	2,928	-5,331	-14,305	1,568	4,653	10,168	-1, 173

3.2.2. Panel Cointegration Tests

To determine whether a cointegrating relationship exits, the recently developed methodology proposed by Pedroni (1999) is employed. Basically, it employs four panel statistics and three group panel statistics to test the null hypothesis of no cointegration against the alternative hypothesis of cointegration

These results are also displayed in Table 2. In this case, we see that for the whole period 2000- 2009, results are obtained that are similar to those without time dummies.

The results of the cointegration analysis tests are presented in table 2. Those tests are developed by (Pedroni 1995, 1997, 2001). In this case, we see that for the whole period 2000- 2009, the results of the ADF tests are presented in the same table for the sake of comparison only. From results of Pedroni cointegration tests 30

we can notice that the whole of statistics are lower than breaking value of normal law for a threshold of 5% (-1,64). The null hypothesis of no co-integration is rejected by all the seven panel statistics, suggesting the series are co-integrated, it can therefore be concluded that there is evidence of cointegration, which means that long-run relationship between of the Seniority of C.E.O and the debt.

Statistique	Panel v-stat	Panel rho- stat	Panel PP-Stat	Panel ADF- stat	Rho- stat Group ¹	PP-stat Group ¹	Stat-ADF Group ¹
ANCI, L1, L2, TAILL, AG, Q,S	3,840	10,220	-5,450	1,567	13,814	-10,543	-4,398

Table 2. Results of cointegration test

3.3 FMOLS and DOLS

When order of integration is decides than for the long run "elasiticities", utilize the FMOLS method. FMOLS was originally designed first time by [Philips and Hansen, (1990); Pedroni, (1995, 2000); and, Philips and Moon, (1999)] to provide optimal estimates of Co-integration regressions (Bum and Jeon, 2005)., we use FMOLS methodology proposed by Phillips (1992) to estimate the idiosyncratic cointegration vectors and the modified FMOLS methodology proposed by Pedroni (2000) to estimate the panel's cointegration vector. FMOLS is superior to OLS when applied to heterogeneous panel with I (1) variables. This technique modifies least squares to account for serial correlation effects and test for the endogeneity in the regressors that result from the existence of a Co-integrating Relationships. Although this non-parametric approach is an elegant way to deal with nuisance parameters, it may be problematic especially in fairly very small samples. To apply the FMOLS for estimating long-run parameters, the condition that there exists a Cointegration relation between a set of I (1) variables is satisfied. There fore we have to confirm the presence of the unit root and test the Co-integrating relation. Standard tests of the presence of the unit root based on the work of Augmented Dicky Fuller (1979, 1981) used to investigate the degree of integration of concerned variables. According to Pedroni, these problems can be marked in heterogeneity presence. For our model estimated cointegrant vectors by FMOLS method is given by (t-student between brackets). The results are shown below:

$$\beta' = \begin{pmatrix} 1 & 3.44 & -1.71 & 1.59 & 65.44 & 0.91 & 6.06 \\ - & (1.79) & (-4.97) & (8.43) & (8.41) & (-9.29) & (9.36) \end{pmatrix}$$

¹ it acts of the tests based on dimension BETWEEN

4. Conclusion

In this study, 70 firms were selected by employing panel data in order to test long run relation between the Seniority of the CEO in the enterprise and the debt by using cointegration tests. Firstly, unit root test were applied in order to test series stationarities. After testing unit root of series, cointegration tests were applied. Pedroni cointegration test resulted in that there was not a clear cointegration between series in the long run. The application of LL and IPS unit root tests shows that the whole of statistical series is affected of a unit root. It should be noted that the number of maximum lags is fixed at three. Selection of the numbers of lags is programmed by Pedroni. The checking of non stationary properties for all variables of panel leads us to study the existence of a long run relation between these variables. From results of cointegration tests of Pedroni we can notice that the whole of statistics are lower than the breaking value of normal law for a threshold of 5% (-1.64). So the whole of these tests requires the existence of a cointegration relation.

5. References

Berger P.G., Ofek E. and Yermack D. (1997). Managerial entrenchment and capital structure decisions. *The Journal of Finance*, vol. 52(4), pp. 1411-1438.

Bum and Jeon, (2005). Demographic Changes and Economic Growth in Korea. SKKU ERI WP-06/05

Dickey, D. A. and Fuller, W. A., (1979). Distribution of the estimators for autoregressive time series with a unit root. *Journal of the American Statistical Association*, 74, 427-31.

Dickey, D. A. and Fuller, W. A., (1981). Likelihood ratio statistics for autoregressive time series with a unit root. *Econometrica*, 49, 1057-72.

Garvey, G. and G. Hanka, (1999). Capital structure and corporate control: The effect of antitakeover statutes on firm leverage. *Journal of Finance*, 54, 519-546.

Hart, Oliver, and John Moore (1995). Debt and Seniority: An Analysis of the Role of Hard Claims in Constraining Management. *American Economic Association*, vol. 85(3), pp. 567-85, June, 1119–58.

Im, K. S., Pesaran, M. H. and Shin, Y. (2003). Testing for unit roots in heterogeneous panels. *Journal of Econometrics* 115, 53-74.

Jensen M.C. (1986). Agency costs of free cash flow corporate finance and takeovers. *American Economic Review*, Vol n°76, pp. 323-339.

Jensen M.C. and Meckling W.H. (1976). Theory of the firm, managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, n°27, pp. 305-360.

Levin, A. & Lin, C. F. (1992). Unit root tests in panel data: asymptotic and finite sample properties. Department of Economics. University of California at San Diego, *Discussion paper* no. 92-93.

Levin A. & Lin C. F. (1993). Unit root tests in panel data: new results. *University of California SD Discussion Paper* 93-56, December.

Levin, A., C. Lin, and C.J. Chu. (2002). Unit Root Tests in Panel Data: Asymptotic and Finite Sample Properties. *Journal of Econometrics* 108: 1–24.

Pedroni, Peter, (1995). Panel Cointegration: Asymptotic and Finite Sample Properties of Pooled Time Series Tests, With an Application to the PPP Hypothesis. *Indiana University working papers in economics* no. 95-013.

Pedroni, Peter. (1999). Critical Values for Cointegration Tests in Heterogeneous Panels with Multiple Regressors. Oxford Bulletin of Economics and Statistics, 61: 653-670.

Pedroni, Peter (2001). Purchasing power parity tests in cointegrated panels. *Review of Economics and Statistics* 83, 727-731.

Pedroni, Peter. (2004). Panel Cointegration: Asymptotic and Finite Sample Properties of Pooled Time Series Tests with an Application to the PPP Hypothesis. *Econometric Theory*, Vol. 3, pp. 579–625.

Phillips P.C.B. and Moon H.R. (1999). Linear regression limit theory for no stationary panel data. *Econometrica*, 67, pp. 1057-1111.

Phillips, P. (1992). Hyper-Consistent Estimation of a Unit Root in Time Series Regression. *Cowles Foundation Discussion Papers*, No. 1040.

Phillips, P., and Hansen, B. (1990). Statistical Inference in Instrumental Variables Regression with I (1) Processes. *Review of Economic Studies*, *57*, 99–125.

Insurance Market Activity and Economic Growth: Evidence from Nigeria

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Abstract: The focus of this study is to empirically assess insurance market activities in Nigeria with the view to determining its impact on economic growth. The period of study was 1970- 2008, the study made use of insurance density measures (premium per capita) as a measure for insurance market activity and real GDP for economic growth. It also employed control variables such as inflation and savings rate as other determinants of growth. The Johansen cointegration and vector error correction approach was used to estimate the relationship between the variables. All the variables used were stationary at first difference and the result showed a long term relationship existing among the variables. The hallmark finding of this study is that the insurance sector did not reveal any positively and significant affect on economic growth in Nigeria within the period of study. The result shows a low insurance market activity in Nigeria and that Nigerians have not fully embrace the insurance industry despite its importance to the growth of the economy.

Keywords: Insurance; Financial Intermediation; Economic growth; Cointegration; Vector error correction approach

JEL Classification: C22; C32; E44; O11; O16

1. Introduction

Insurance is one of the cornerstones of modern-day financial services sector. In addition to its traditional role of managing risk, insurance market activity, both as intermediary and as provider of risk transfer and indemnification, may promote growth by allowing different risks to be managed more efficiently, promoting long term savings and encouraging the accumulation of capital, serving as a conduit pipe to channel funds from policy holders to investment opportunities, thereby mobilizing domestic savings into productive investment (Skipper, 1997; Arena, 1998). According to Vayanos and Hammound (2006) a thriving insurance sector is not only evidence of an efficient financial service sector, but it is also a key barometer for measuring a healthy economy.

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During the last decades, there have been faster growth in insurance market activity in both developing and transition economies given the process of financial liberalization and financial integration (Brainard, 2008), which raises questions about its impact on economic growth. As noted by Wachtel (2001), Favara (2003) and Levine (2004), research efforts so far have not examined the impact of other financial markets or instruments on economic growth in similar depth. Compared to the vast literature focusing on bank, stock and bond markets and their respective environment, the insurance sector has hardly been investigated in its role vis-à-vis economic growth.

The few research efforts on the insurance-growth nexus, while emphasizing the importance of the topic, concentrated on a few countries over fairly short or distant time horizons (e.g. Catalan et al, 2000; Ward and Zurbruegg, 2000), dealt with specific subsectors (Beenstock et al, 1988; Browne and Kim, 2000) only, are concerned with contagion and other possible negative effects the insurance sector can transmit onto the economy (e.g. Das et al, 2003) or treats the insurance growth-link rather as a side issue (e.g. Holsboer, 1999). Given the growing importance of the insurance sector and the increasing number of interlinks to other financial sectors, the evolving role of insurance companies vis-à-vis economic growth and stability should be of growing relevance for policy makers and supervisors.

The objective of this paper therefore, is to investigate empirically the relationship between insurance activity and economic growth in Nigeria by employing the Johansen multivariate and vector error correction framework using time series data for the period 1970 to 2008.

2. Literature Review

Insurance is often defined as the act of pooling funds from many insured entities (known as exposures) in order to pay for relatively uncommon but severely devastating losses which can occur to these entities. The insured entities are therefore protected from risk for a fee, with the fee being dependent upon the frequency and severity of the event occurring (Encarta dictionary, 2009). Thus, it is a commercial enterprise and a major part of the financial services industry. Theoretical studies and empirical evidence have shown that countries with better-developed financial systems enjoy faster and more stable long-run growth. Well-developed financial markets have a significant positive impact on productivity, which translates into higher long-run growth. Merton (1995) citing Solow's (1956) noted that in the absence of a financial system that can provide the means for transforming technical innovation into broad implementation, technological progress will not have significant and substantial impact on the economic development and growth". This study seeks to investigate the link between the insurance sector and economic growth and hence contribute to the current

insurance-growth nexus literature. The importance of the insurance-growth nexus is growing due to the increasing share of the insurance sector in the aggregate financial sector in almost every developing and developed country. Theoretical conceptions explain that financial systems influence savings and investment decisions and hence long-run growth rates through the following functions (i) lowering the costs of researching potential investments, (ii) exerting corporate governance, (iii) trading, diversification, and management of risk, (iv) mobilization and pooling of savings, (v) conducting exchanges of goods and services, and (vi) mitigating the negative consequences that random shocks can have on capital investment (Levine, 2004). Financial intermediaries support development through the improvement of these functions (i.e., the amelioration of market frictions such as the costs of acquiring information, making transactions, and enforcing contracts and allowing economies to more efficiently allocate resources (savings) across investments). However, the positive effects of financial development are tailored by the macro policies, laws, regulations, financial infrastructures and enforcement norms applied across countries and time. In support of this proposition, Arena (2006) posited that insurance market activity, both as financial intermediary and as provider of risk transfer and indemnification, may promote economic growth by allowing different risks to be managed more efficiently encouraging the accumulation of new capital, and by mobilizing domestic savings into productive investments.

It is also believed that insurance market activity may not only contribute to economic growth by itself but also through complementarities with the banking sector and the stock market. In the first case, the joint effect with the banking sector, the development of insurance activity could encourage bank borrowing by reducing companies' market cost of capital, which influences economic growth by increasing the demand for financial services (see Grace and Rebello, 1993).

Further to this, property insurance may facilitate bank intermediation activity by for example partially collateralizing credit, which would reduce bank's credit risk exposures thus, promoting higher levels of lending (see Zou and Adams, 2006). At the same time, the development of the banking sector may facilitate the development of the insurance activity through a much more effective payment system allowing an improved financial intermediation of services (Webb, Grace, and Skipper, 2002). Regarding the conjoint effect with the stock market, the development of the insurance activity, in particular life insurance companies, could promote stock market development by investing funds (savings) raised through contractual saving products in stocks and equities (Impavido, et al. 2003; USAID, 2006).

In analogy to other financial sectors (Blum et al 2002), the link between the insurance and the real sector can be classified in terms of causality with respect to five possible hypotheses: (1) no causal relation; (2) demand following, e.g.

economic growth leads to a rise in demand for insurance; (3) supply-leading, e.g. growth in insurance smoothes short-term economic volatility and thus induces economic growth in the long run, plus growth in investment by insurance companies induces economic growth; (4) negative causal link from insurance to growth (e.g. growing insurance causes more reckless behaviour ("moral hazard"), resulting in a less efficient and more volatile economy; (5) interdependence. In the following, we discuss the various functions performed by the insurance sector and its possible link to economic growth.

On the empirical studies, earlier work conducted by Beenstock, Dickinson and Khajuria (1988) applied pooled time series and cross-section analysis on 1970-1981 data, covering mainly 12 countries. They regress premiums for property liability insurance (PLI) onto gross national product (GNP), income and interest rate development. They find that premiums are correlated to interest rate and GNP; marginal propensity to insure (short and long-run) rises with income per capita and is always higher in the long run. Beenstock et al (1988) argue that insurance consumption is not affected by economic cycles or cyclical income variations. Other studies that employed cross-sectional analysis include (Outreville (1990), Browne, Chung and Frees (2000), Beck and Webb (2002) and Park, Borde & Choi (2002). In the study of Beck and Webb (2002) they applied cross-country and timeseries analysis for the relation between life insurance penetration, density, and percentage of private savings to GDP, real interest rate, inflation volatility and others as the explanatory variables. Strong evidence was found for GDP, old dependency ratio, inflation and banking sector development. From the group of additional explanatory variables anticipated inflation, real interest rate, secondary enrolment and the private savings rate were found to be significant. Park, Borde & Choi (2002) concentrated their research work on the linkage between insurance penetration and GNP and some socio-economic factors adopted from Hofstede (1983). The results of analysis of the cross-sectional data from 38 countries in 1997 show significance for GNP, masculinity, socio-political instability and economic freedom.

Ward and Zurbruegg (2000) employed Granger causality to test between total real insurance premiums and real GDP for nine OECD countries over the 1961 to 1996 period. For two countries (Canada, Japan) the authors found the insurance market leading GDP and for Italy they found a bidirectional relationship. The results for the other countries showed no connection. In line with the above method, Kugler and Ofoghi (2005) added cointegration analysis to the causality test to examine the long-run relationship between insurance market size and economic growth in United Kingdom for the period from 1966 to 2003 for long-term insurance, and for the period from 1971 to 2003 for general insurance (from 1991 to 1997 for marine-aviation transport insurance and reinsurance). In comparison to Ward and Zurbruegg, who used aggregate variable in their estimation (total written

premiums) because of possibility of cointegration, this study used disaggregated data for the measure of market size. The authors found a long-run relationship between development in insurance market size and economic growth for all components of insurance markets. Causality tests show that there is a long-run causality from growth in insurance market size to economic growth for eight out of nine insurance markets (the exception is pecuniary loss insurance). Causality in short-run exists from life, liability and pecuniary loss insurance to economic growth and there is an evidence of bidirectional causal relationship in the long-run between economic growth and insurance market size for the three insurance categories. From the foregoing, it could be observed that though there are strong theoretical explanations for positive impact of insurance sector to economic growth, the results of empirical researches carried out up to date are mixed. However, the number of empirical studies is relatively small, especially in relation to those on banking contribution to economic growth. Moreover, the insurancegrowth nexus in transition countries is examined separately only as a part of one study (Haiss and Sümegi, 2008) and one major cause is availability of data on insurance activity. In order to contribute to filling the gap, the study is focused on examining the insurance-growth nexus using Nigerian data.

3. Methodology

This study applies the endogenous growth model as modified by Pegano (1993) to examine how Insurance Market Activity influences growth in Nigeria. To capture the potential effects of financial development on growth, consider the simplest endogenous growth model - the 'AK' model, where aggregate output is a linear function of the aggregate capital stock:

$$Y = AK_t \tag{1}$$

This production function can be seen as a 'reduced form' resulting from one of two underlying frameworks. One is a competitive economy with external economies as in Romer (1989), where each firm faces a technology with constant returns to scale but productivity is an increasing function of the aggregate capital stock K,. For instance, consider an economy with N identical firms, each producing output $y_t = Bk_t^a$. with its capital stock k, Suppose that B is regarded as a parameter by individual firms but actually responds to the average capital stock according to $B = Ak^{1-a}$. Then aggregate output, Y, = Ny_t is given by (1). Alternatively, the AK model can be derived assuming that Kt is a composite of physical and human capital as in Lucas (1988), the two types of capital being reproducible with identical technologies.

For simplicity, assume that the population is stationary and that the economy produces a single good that can be invested or consumed - and, if invested, depreciates at the rate 6 percent per period. Gross investment then equals

$$I_t = K_{t+1} - (1-\delta)K_t \tag{2}$$

In a closed economy with no government, capital market equilibrium requires that gross saving S, equals gross investment It. For reasons that will be made clear below, it is convenient to assume that a proportion $1 - \phi$ of the flow of savings is 'lost' in the process of financial intermediation:

$$\emptyset \mathbf{S}_{\mathsf{t}} = I_{\mathsf{t}} \tag{3}$$

From equation (1), the growth rate at time t+l is $g_{t+1} = Y_{t+1}/Y_{t-1} = K_{t+1}/K_{t-1}$. Using eq. (2) and dropping the time indices, the steady-state growth rate can be written as

$$g = A + \frac{1}{V} - \delta = A \emptyset S - \delta \tag{4}$$

in the second step, Pegano (1993) used the capital market equilibrium condition (3) and denoted the gross saving rate S/Y by s. Eq. (4) reveals succinctly how financial development (in this case insurance market activity) can affect growth: it can raise \emptyset , the proportion of saving funneled to investment; it may increase A, the social marginal productivity of capital; and it can influence s private saving rate.

3.2 Model Specification

In line with the analytical framework, the model specified will be as follows:

$$Y_{t} = \beta_{0} + \beta_{1} I D_{t} + \beta_{2} I n f_{t} + \beta_{3} S R_{t} + \varepsilon_{t}$$

$$\tag{5}$$

Where:

Y_t is the dependent variable which represents real GDP.

ID_t is the insurance variables which represent insurance density and is defined as premium per capita. This variable will be used as the insurance variable to capture the level of insurance market activity.

Inft is inflation rate which serves as a control variable

SRt is Savings rate which also serves as a control variable

 ε_t is the stochastic error term

3.3 Data Description and Sources

This study used annual data from 1970-2008. The data were sourced from the Central Bank of Nigeria (CBN) Statistical Bulletin, 2008. The real Gross Domestic Product (RGDP) is used to proxy for national income. It is preferable to nominal GDP because it is adjusted for inflation:

Insurance density (ID) is measured as the total premium divided by population (defined as premium per capita). The premium income directly depicts the interest of the economy in insurance coverage; thus it was used to capture the level of insurance market activity in Nigeria. Inflation rate (INF) is defined as the percentage change in price level overtime. It is often used as an indicator of the cost of doing business in an economy. Savings rate (SR) is a means by which financial institutions can pool resources for investment purposes from the general public. It is measured as the ratio of household savings deposited in financial intermediaries relative to GDP and serves as a proxy for financial intermediary development.

Insurance market activity (i.e. ID) is expected to be positively related to economic growth, this implies that the higher people demand for insurance premiums, the higher the economic growth in the country. Inflation rate regarded as a control variable is expected to be negatively correlated with growth. High inflation has the tendency of distorting economic activity; thus an increase in the rate of inflation will reduce the level of economic growth. Beck and Webb (2003) mention that if the private savings rate were to rise, people might or might not be willing to increase their savings in life insurance policies. In other words, the relationship between life insurance and the private savings rate is ambiguous. The empirical evidence denotes that the share of life insurance in savings will decrease with a higher savings rate, but will increase with further life insurance penetration. There is a long-term relationship between economic growth and the growth rate of savings; hence should be positive.

4. Empirical Analysis

The empirical analysis starts with testing for unit roots in the data. We use both the Augmented Dickey Fuller (ADF) and Phillips – Perron (PP) tests to find the existence of unit root in each of the time series. The results of both the ADF and PP tests are reported in Table 4.1 and 4.2.

Table 4.1. ADF and PP Stationarity test at levels

Variables	ADF (Intercept)	ADF (Intercept & Trend)	PP (Intercept)	PP (Intercept & Trend)
LRGDP	-2.279(-3.615)*	-1.980(-4.219)*	-5.373(-3.615)*	-1.754(-4.219)*
LID	-0.618(-3.621)*	-2.605(-4.226)*	-0.732(-3.615)*	-1.992(-4.219)*
INF	-3.105(-2.941)**	-3.049(-3.198)***	-2.930(-2.609)***	-2.864(-4.219)*
SR	-2,084(-3.615)*	-2.298(-4.219)*	-1.872(-3.615)*	-2.167(-4.219)*

Note: * and *** denotes Significance at 1% & 10% level, respectively. Figures within parenthesis indicate critical values. Mackinnon (1991) critical value for rejection of hypothesis of unit root applied.

Source: Author's Estimation using Eviews 6.0.

The result in table 4.1 shows that all the variables (except Inflation rate) appear non stationary at levels. This can be seen by comparing the observed values (in absolute terms) of the ADF test statistics with the critical values (also in absolute terms) of the test statistics at the 1%, 5% and 10% level of significance. As a result of the non stationarity of the other variables, we differenced them once and both the ADF and PP test were conducted on them. The result is shown in table 4.

Table 4.2. ADF and PP Stationarity test at first difference

Variables	ADF (Intercept)	ADF (Intercept & Trend)	PP (Intercept)	PP (Intercept & Trend)
LRGDP	-5.678(-3.621)*	-5.980(-4.226)*	-5.696(-3.621)*	-7.143(-4.226)*
LID	-3.895(-3.621)*	-3.841(-3.536)**	-3.700(-3.621)*	-3.640(-3.536)**
INF	-6.229(-3.626)*	-6.204(-4.234)*	-11.119(-3.621)**	-11.995(-4.226)*
SR	-6.665(-3.626)*	-6.915(-4.234)*	-8.206(-3.621)*	-8.307(-4.226)*

Note: * and *** denotes Significance at 1% & 10% level, respectively. Figures within parenthesis indicate critical values. Mackinnon (1991) critical value for rejection of hypothesis of unit root applied.

Source: Author's Estimation using Eviews 6.0.

It could be observed from the above table that all the variables achieved stationarity at first difference. Thus, all the variables achieved stationarity and on the basis of this, the null hypothesis of non-stationarity is rejected and it is safe to conclude that the variables are stationary.

4.2 Cointegration Test Result

With the confirmation of the stationarity of the variables, we proceeded to examine the presence or non-presence of cointegration among the variables. When a cointegration relationship is present, it means that the real GDP, Insurance activity (ID). Inflation and Interest rate share a common trend and long-run equilibrium (as suggested theoretically) in the growth model. We started the cointegration analysis by employing the Johansen and Juselius multivariate cointegration test. The cointegration test result is presented in Table 4.3 and 4.4.

Table 4.3. Unrestricted Cointegration Rank Test (Trace)

Hypotheized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob**
None*	0.578183	52.98214	47.85613	0.0153
At most 1	0.281092	21.04439	29.79707	0.3549
At most 2	0.176447	8.833572	15.49471	0.3810
At most 3*	0.043638	1.650882	3.841466	0.1988

Trace Test indicates 1 cointegrating eqn(s) at the 0.05 level

Table 4.4. Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypotheized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob**
None*	0.578183	31.93775	27.58434	0.0129
At most 1	0.281092	12.21081	21.13162	0.5270
At most 2	0.176447	7.182690	14.26460	0.4677
At most 3*	0.043638	1.650882	3.841466	0.1988

Max-eigen value test indicates 1 cointegrating eqn(s) at the 0.05 level

^{*}denotes rejection of the hypothesis at the 0.05 level

^{**}MacKinnon-Haug-Michelis (1999) p-values

^{*}denotes rejection of the hypothesis at the 0.05 level

^{**}MacKinnon-Haug-Michelis (1999) p-values

The result of the cointegration test conducted on the growth model shown in table 4.3 and 4.4 reveals one cointegrating vector at 5 percent level of significance for Trace and Max-Eigen Statistic. It suggests that there is a long-run relationship between the variables tested. Since there is at least one cointegrating vector, an economic interpretation of the relationship between insurance market activity and economic growth can be obtained by normalizing the estimates of the unconstrained cointegrating vector which yields the following:

$$LX = 1.000 - 1.337 LID - 0.251 INF + 0.477 SR$$

It can be readily observed from the normalized estimates that the Gross Domestic Product is negatively related to Insurance market activity contrary to theoretical predictions; it has a coefficient of -1.333 and the t-statistics is insignificant – an indication of low insurance market activity in Nigeria. Due to the problem of unavailabity of data, insurance market activity could not be divided between life and general insurance to see their individual impact on the GDP. However, beside corporate bodies that provide insurance cover for ther staff, Nigerians are yet to fully embrace insurance cover (both life and general insurance). This has over the years made the operations of the insurance company in Nigeria not having much penetration to the GDP comparable to other institutions like banks and the stock market.

Inflation, one of the control variables came out with a negative sign though insignificant. It predicts that with the period of study, 1% increase in inflation leads to 0.25% reduction in the gross domestic product. Inflation has been described as depicting a high cost of doing business in a country does not always augur well with growth. On its own part, the savings rate as theoretically predicted is positively related to gross domestic product. 1% increase in savings rate leads to about 0.477% increase in the gross domestic product. The essence of including savings rate in the study is that it can substitute life insurance in the growth process. Beck and Webb (2003) posited it is expect that individuals with higher savings and who are more educated and financially sophisticated are more prone to have a life insurance contract – though the study did not estimate the coefficients of the interaction terms between the two variables.

4.3 Error Correction Model:

Having observed the longrun relationship of the variables, we at this point present the error correction result to ascertain the speed of adjustment in the short run. This is shown in table 4.5

Table 4.5. Error Correction Result (Export Model)

Dependent Variables: ΔLX (-1)						
	Coefficient	Std. Error	t-statistic	Prob.		
C	0.149020	0.163720	0.910207	0.3726		
ΔLRGDP(-2)	-0.007095	0.214318	-0.033104	0.9739		
Δ LRGDP(-3)	-0.151139	0.219488	-0.688600	0.4983		
Δ LID(-1)	0.203861	0.392538	0.519340	0.6087		
ΔLID(-2)	-0.062082	0.458366	-0.135443	0.8935		
Δ LID(-3)	-0.098702	0.396211	-0.249115	0.8056		
Δ INF(-1)	-0.004169	0.006498	0.641542	0.5278		
Δ INF(-2)	0.000385	0.005977	0.064381	0.9492		
Δ INF(-3)	0.000479	0.006599	0.072522	0.9428		
ΔSR(-1)	-0.009152	0.029728	-0.307853	0.7611		
ΔSR(-2)	-0.011962	0.033516	-0.356909	0.7246		
ΔSR(-3)	-0.023351	0.030509	-0.765360	0.4522		
ECM(-1)	-0.141081	0.137746	-1.024208	0.3169		
R-squared	0.129856	Mean depende	ent var	0.138991		
Adjusted R-squared	-0.344768	S.D. depender	nt var	0.362653		
S.E. of regression	0.420547	Akaike info ca	riterion	1.384033		
Sum squared resid	3.890924	Schwarz criter	rion	1.961733		
Log likelihood	-11.22057	Hannan-Quim	n criter.	1.583455		
F-statistic	0.273597	Durbin-Watso	on stat.	1.761060		
Prob(F-statistic)	0.988016					

The result indicates that insurance-growth in Nigeria has an automatic adjustment mechanism; thus it responds to deviations from equilibrium in a balancing manner. The speed of adjustment parameter is -0.1410. This means that the disequilibrium can be corrected at rate of 14%.

5. Conclusion

The importance of the insurance sector within total financial intermediation has risen over time and the magnitude and intensity of links between insurance, banking and capital markets has also risen. Thus the likely impact of insurance on the economy is expected to have gone up. This informed the need to conduct an empirical survey of insurance market activity and economic growth in Nigeria.

Taking note that the insurance industry in Nigeria is highly underdeveloped, it was worrying but not totally surprising that the Insurance density used as a proxy for insurance market activity did not show any significant positive relationship with the real domestic product which was deployed as a measure of economic growth. Thus, functions of insurance companies - providing means of risk management and performing mobilization and allocation of resources - though predicted important for economic growth could not be proved empirically. Other control variables (Inflation and savings rate) used in the study had their effect on growth. Inflation had a negative relationship while savings rate had a positive relationship with growth. The major finding of this study is that insurance density (premium per capita) did not show significant positive relationship with economic growth within the period covered by this study. This result is contrary to theoretical expectation and the findings of Ward and Zurbruegg, (2000), Hammound, (2006).

While sound economic, legal and political environments provide fertile ground for robust insurance markets, the key to insurance market development is investment in market infrastructure. It is this infrastructure that enables an effective marketplace to exist for the pooling, trading, and management of many of society's risks. Unfortunately, this infrastructure is lacking in Nigeria, leaving insurance markets to operate ineffectively and inefficiently. In addition, this study recommends the strengthening of regulatory and supervisory capacity of the insurance industry in Nigeria and the provision of resources for oversight functions especially in the areas of market conduct thereby ensuring that claims are paid fairly and efficiently.

6. References

Allen, F. A. (1998). The Theory of Financial Intermediation. *Journal of Economic Surveys*, 1461-1485.

Arena, M. (2006). Does Insurance Market promote Economic Growth and Employment in the EU. *Journal of Risk and Insurance*, 921-946.

Arena, M. (2008). Does Insurance Market Activity promote Economic Growth? A Cross-Country study for Industrialized and Developing countries. *Journal of Risk and Insurance*, 921-946.

Beck, T., and Webb, I. (2003) Economic, Demographic, and Institutional Determinants of Life Insurance Consumption across Countries. *The World Bank Economic Review*, 17: 51-88

Beenstock, M. Dickinson, G. & Khajuria, S. (1988). The Relationship between Property-Liability Insurance Penetration and Income: An International Analysis. *The Journal of Risk and Insurance*, 55(2): p. 259 – 272, American Risk and Insurance Association.

Bikker (2008). Competition and Efficiency in the Dutch Life Insurance Industry. *Journal of Risk and Insurance*, 15-30.

Brainard, L. (2006). What is the Role of Insurance in Economic Development. Zurich.

Curak, L. P. (2009). Insurance Sector Development and Economic Growth in Transition Countries. *International Research Journal on Finance and Economics*, 29-41.

Dickey, D. A. (1981). Likelihood Ratio Statistics for Autoregressive Time Series with a Unit Root. *Econometrica*, 1057-1072.

Dowling, W. (1982). Insurance industry goes Global. Business America, 9-12.

Favara, G. (2003). An Empirical Reassessment of the Relationship Between Finance and Growth. *IMF Working Paper 03/123*.

Gibbons, R. (2007). The Global Insurance Market Comes of Age. *International Insurance Quarterly*, No 2, Vol 14.

Grace, M. F. / Rebello, M. J. (1993). Financing and the Demand for Corporate Insurance. *Geneva Papers on Risk and Insurance* 18: 147 – 172.

Haiss, P. A., and Sümegi, K. (2008). The Relationship of Insurance and Economic Growth in Europe: A Theoretical and Empirical Analysis. *Emprica*, 35(4): 405-431.

Hammond, J. D., Houston, D. B. and Melander, E. R (1967). Determinants of Household Life Insurance Premium Expenditure: An Empirical Investigation. *Journal of Risk and Insurance*, 34: 397-408

Impavido, G, Alberto R. M, and Therry T. (2003). The Impact of Contractual Savings Institutions on Securities Markets. *The World Bank, Policy Research Working Paper* 2948.

Johansen, S. (1988). Statistical Analysis of Cointegrating Vectors. *Journal of Economic Dynamics and Control*, 231-254.

Kugler, M., and Ofoghi, R. (2005). Does Insurance Promote Economic Growth? Evidence from the UK. *Working paper*, University of Southampton.

Levine, R. (1997). Financial Development and Economic Growth: Views and Agenda. *Journal of Economic Literature*, 688-726.

Levine, R. (2004). Finance and Growth: Theory and Evidence. NBER Working Paper.

Merton, R.C. (1995). A Conceptual Framework for Analyzing the Financial Environment. Harvard Business School Press, pp. 3-31.

Muller, W. (1981). Theoretical Concepts of Insurance Production. *The Geneva Papers on Risk and Insurance*, 63-83.

Outreville, J. (1990). The Economic Significance of Insurance Markets in Developing Countries. *Journal of Risk and Insurance*, 487-498.

Pagano, M. (1993). Financial Markets and Growth- An Overview. European Economic Review, pp. 613-622.

Romer, P, (1989). Capital Accumulation and the Theory of Long-run Growth. in. R. Barro. ed. *Modern business cycle theory* (Harvard University Press, Cambridge, MA).

Solow, R. M. (1956). A Contribution to the Theory of Economic Growth. *The Quarterly Journal of Economics*, pp. 65-94.

***(2006). Assessment on how Strengthening the Insurance Industry in Developing Countries Contributes to Economic Growth. U.S.A: USAID.

Vadlamannati, K. (2008). Do Insurance Sector Growth and Reforms Effect Economic Development? Empirical Evidence from India. *The Journal of Applied Economic Research*, 43-86.

Webb, I., Grace, M. F. and Skipper, H. D. (2002). The Effect of Banking and Insurance on the Growth of Capital and Output. *Center for Risk Management and Insurance, Working Paper 02*.

Zurbruegg, W. D. (2000). Does Insurance Promote Economic Growth? Evidence from OECD Countries. *The Journal of Risk and Insurance*, 489-506.

Financial Institutions and Services

Ratio Spread with Calls- Creating a Zero Downside Risk Strategy in Stock Market

Priyanka Vashisht1

Abstract: There is a general perception that whenever a Stock goes down, traders in that stock are doomed. This was probably true before 2001, when derivatives were not introduced in the Indian Stock Markets. Nowadays, there are many strategies available in the derivatives segment, which either make huge amounts of money for the traders whenever the market goes down, or there is Zero risk on the downside. One such strategy in options segment of derivatives is Ratio spread with Calls. This strategy has Zero Risk on the downside (with chosen strike prices and entry time), and if the Market is mildly bullish, profits can also be made on the upside. This Research paper examines the results of Ratio spread with Calls as applied on Nifty in 42 monthly F&O series, with the aim to create a Zero Downside Risk Strategy which can be easily understood by even a beginner in Stock Market.

Keywords: Zero Downside Risk; Nifty; Options; Ratio Spread with Calls (1x2); Systematic Trading Plan

JEL Classification: G14; G 15

1. Introduction

Ratio Spread with Calls is a mildly bullish strategy which involves buying In the Money Calls, and recovering their cost by selling At the Money or Out of the Money calls with the same expiry date. Since premium of In the Money Calls is more than At the Money or Out of the Money Calls, more quantity of At the Money or Out of the Money Calls is required to be sold than In the Money Calls so as to recover the cost. When the premium of Calls sold is more than or equal to the Calls Bought, there is Zero downside risk, irrespective of the level of fall in the stock. There is a general myth about Stock Market that whenever there is a fall in the Stock Market, traders are doomed. Year 2008 witnessed the worst recession as well as the worst Bear phase globally. Indian Index fell to almost to $1/3^{rd}$ level in a span of only 10 Months. It's true that Investors in the Cash Segment of Stock Market were almost wiped off. Many Investors lost almost their whole life

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earnings. However, had they invested in Ratio spread with Calls, they wouldn't have lost a single penny. As a matter of fact, they may have been sitting on exciting profits. By following this strategy, Investors/ traders can trade without fearing about unforeseen/unfavourable events in the Global/Local Markets, or negative events related to the specific stocks.

The Key word here is *downside risk*. A word of caution is that there can be unlimited upside risk. However, it has been observed over years that resistance levels of the stocks are stronger than the support levels i.e. there are more chances of irrational selling in the stock rather than irrational buying. Moreover, by choosing the right strike price, and by entering at a point in an F&O Series which gives optimum premiums for creating this strategy, and which creates an optimum probability of F&O Expiry happening in the profitable range, upside risk can be managed to a greater extent (in case the trade is matured on expiry).

Profit/ Loss (On Expiry) from this Strategy = Expiry value of calls bought-Premium of calls bought + Premium of Calls Shorted- Expiry Value of Calls shorted

Maximum Profit on expiry is realized when expiry occurs at the strike price on which the calls are shorted. Upside losses can be unlimited.

Breakeven Point is achieved when Difference between the expiry value of calls sold and bought is equal to the difference between premium of calls sold and calls bought.

A research was conducted on Nifty to empirically verify the results of a 1x2 (Number of Calls sold = Twice the number of Calls bought) Ratio spread with shorted strike price as At the Money Strike price, and Long Strike price as first In the Money Strike Price. Entry point chosen for this research was first working day of the week before monthly F&O expiry. Aim of this research was to create a Zero Downside Risk strategy for traders which cover the risk of ever looming downside risk in Stock Market because of unforeseen events.

2. Need of the Research

Stock Market behaviour is dependent upon huge number of dynamics. Many such dynamics are unforeseen events. More often, these unforeseen events result in a steep fall in Stock Market valuations. Large and Professional investors manage such uncertainties with their skill and knowledge, but small investors, who often trade with their limited knowledge, end up losing their hard earned money because of panic. There is a strong need to introduce a trading instrument to small (retail) investors, which takes care of the market downsides because of unforeseen situations, is easy to understand, and is systematic and scientific in nature.

3. Objectives of Research

Following is the summary of major objectives of Research:

- To create a trading instrument for small investors which is risk free if the Market falls down (thus insulating the small investors in panic situations)
- To test such a trading instrument in terms of safety, ease of use and decent returns
- To create the trading instrument in such a manner that small investors can trade/invest in a systematic manner without worrying much about the market dynamics.
- To explain the benefits and limitations of such trading instrument.

4. Review of Literature

Sharepundit.com (promoted by Expedient Consultants, a leading Research firm in Options segment of Stock Market) write in their research report released in January 2011 that opening time of first working day of a week before expiry of monthly F&O series is the ideal time to enter many option strategies like Ratio Spread with Calls, Long Call Butterfly, Bull Call Spread. The reasons given by them in their report are:

- a) Premiums of Options start depreciating at a faster pace from this time frame.
- b) This entry point serves as an optimum time point both in terms of proximity to expiry as well as quantum of premiums to be shorted.

In their other report, released in March, 2011, sharepundit.com conclude that there is a strong need to promote systematic trading plans in options among retail investors so that they can trade every month safely and profitably in a scientific manner without worrying about fast changing dynamics of stock market. They add that knowledge of options among retail investors is below average, and there is a strong need to present various options strategies to them in a simplified manner.

National Stock Exchange (nseindia.com) of India is proactive in educating small investors throughout India. They keep on organising investor camps throughout India. They always advocate the idea of systematic investing to small investors.

Frederick, Randy. Timing your Butterfly Trades, Futures 34, 13 (Oct 2005), pp. 36-38 writes that Timing the trades in the options segment is extremely important. Also important are the choice of strike prices in various options strategies. In this Research, strike prices have been chosen in such a manner that shorted strike prices amount to maximum time value.

Fortune financial (ffsil.com) write in one of their report sent to their clients (May 2011) that Ratio spread with calls is a comparatively safer strategy for small investors if entered at an appropriate time and in an appropriate Market environment.

5. Research Design

Stock chosen for Research was Nifty. Time period chosen for Research was from January, 2008 (F&O series) to June 2011 (F&O series). It involved a total of 42 F&O Series. Nifty was at its peak of around 6200 in January 2008. In the next ten month, it fell to around 2250 (intra-day) in October 2008 in Just a matter of 10 months. It was probably the worst Bear phase of Stock Market. Thereafter, Bull phase started in May 2009, and Nifty again reached its peak in later half of 2010. Spirit of our research is to create a strategy for Investors/ Traders which has Zero Downside Risk. Also, Ratio spread with calls has an Inherent Upside Risk. As the time period chosen saw both Bear phase and Bull phase, this strategy was tested for both the extremes.

Opening time of first working day of a Week before monthly F&O series Expiry was chosen as entry point of this strategy, and Expiry time was chosen as exit point for this strategy. At this entry point, it was observed that in a majority of cases in the recorded monthly F&O series, Premium inflow (Premium of Calls sold) was more than Premium Outflow (Premium of Calls Bought).

Table 1. Ratio of premiums of In the Money Call (Buying Strike Price) & At the Money Call (Selling Strike Price) at the Entry Time

S.no	Series	In the Money Call Premium (Rs)	At the Money Call Premium (Rs)	Ratio of In the Money and At the Money Call Premium
1.	June-11	116	60	1.93: 1
2.	May-11	155	100	1.55: 1
3.	Apr-11	164	95	1.73: 1
4.	Mar-11	167	108	1.55: 1
5.	Feb-11	163	98	1.66: 1
6.	Jan-11	182	114	1.60: 1
7.	Dec-10	165	84	1.96: 1
8.	Nov-10	140	85	1.65: 1
9.	Oct-10	130	75	1.73 1

10.	Sept-10	135	65	2.08: 1
11.	Aug-10	90	33	2.73 1
12.	July-10	110	49	2.24: 1
13.	June-10	160	97	1.65: 1
14.	May-10	160	99	1.61: 1
15.	Apr-10	152	80	1.9: 1
16.	Mar-10	146	80	1.83: 1
17.	Feb-10	176	109	1.61: 1
18.	Jan-10	161	85	1.89: 1
19.	Dec-09	132	79	1.67: 1
20.	Nov-09	180	107	1.68: 1
21.	Oct-09	106	51	2.08: 1
22.	Sept-09	158	110	1.44: 1
23.	Aug-09	175	119	1.47: 1
24.	July-09	175	129	1.36: 1
25.	June-09	215	150	1.43: 1
26.	May-09	219	157	1.39: 1
27.	Apr-09	156	95	1.64: 1
28.	Mar-09	135	70	1.93: 1
29.	Feb-09	163	101	1.61: 1
30.	Jan-09	162	94	1.72: 1
31.	Dec-08	155	100	1.55: 1
32.	Nov-08	220	165	1.33: 1
33.	Oct-08	205	148	1.39: 1
34.	Sept-08	177	115	1.54: 1
35.	Aug-08	175	114	1.54: 1
36.	July-08	210	150	1.4: 1
37.	June-08	135	82	1.65: 1
38.	May-08	160	99	1.62: 1
39.	Apr-08	190	138	1.38: 1
40.	Mar-08	180	125	1.44: 1
41.	Feb-08	210	175	1.2: 1
42.	Jan-08	210	155	1.35: 1
		•	•	

In the above Table 1, it can be seen that in 38 of the 42 F&O series, Ratio of In the Money Call Premium and At the Money Call Premium was less than 2:1. Whenever this Ratio is less than or equal to 2:1 in a 1X2 Ratio spread with Calls, there is a Zero downside Risk. This can be explained by the fact that two At the Money calls are sold for every In the Money Call bought. Thus, Buying Premium will be lesser that the Premium Sold. On Expiry, When Stock price is lesser than 52

the Strike price on which a Call is bought or sold, the Call becomes Out of the Money, and its Intrinsic Value is Zero. Since on expiry, the time value is also Zero, it's Market/ Settlement price is Zero. When Buying premium is less than or equal to the Premium sold, profit on the sold calls is more than or equal the loss on bought calls. There is either a Net profit from the trade (in case Premium sold is more) or there is a breakeven situation (when bought and sold premiums are equal). Even before expiry, it is observed that in this strategy, if the stock falls below entry level, there is Zero Downside Risk. There are two reasons for the same. Firstly, there are two At the money Calls shorted for one In the Money Call Purchased. Also, in case of a fall, At the Money Call will become Out of the Money, and Out of the Money Options depreciate more than In the Money Calls since they have more Time value. During our Research period, there were 38 instances in which there was an absolute Zero Downside Risk, and there were 4 instances (Sept 2010, August 2010, July 2010 & October 2009) where there was theoretically a limited downside risk potential (From Table 1). It should be noted that a Zero Downside Risk strategy could also have been created in these four instances by moving one step In the Money for both bought and Sold strike price levels. However, it could have given a more potential upside risk as compared to other instances.

The chosen Entry point was just 11 Calendar days away from Expiry (7 Calendar days on an average of week before expiry, and 4 Calendar days of expiry week as F&O expiry happens on last Thursday of a Month). An entry point more near to expiry was not chosen as ratio of premiums of In the money calls and At the Money Calls beyond this point was not enough to give Zero downside risk. Farther entry points from expiry gave a better ratio, but the probability of expiry happening in the profitable Zone was lesser. At the Money strike price was chosen for selling the calls, and first In the Money strike price was chosen for buying the Calls. In the 1x2 Ratio spread, one In the Money Call was purchased and two at the money calls were shorted. At the Money call was chosen for selling as it gives maximum time Value.

Table 2. Nifty Entry/ Exit Levels, Strike Prices Chosen, & Difference between Nifty closing level and Buying Strike Price

S.no	Series	Nifty	Nifty	In the	At the	Difference
		Futures at	Futures	Money	Money	between
		Entry	on Expiry	Strike	Strike Price	Nifty Expiry
		Point	(Exit	Price	(Selling)	level and In
			Point)	(Buying)		the Money
						Strike Price
1	June-11	5374	5647	5300 CE	5400 CE	347
2	May-11	5534	5412	5400 CE	5500 CE	12
3	Apr-11	5832	5785	5700 CE	5800 CE	85

4	Mar-11	5410	5834	5300 CE	5400 CE	534
5	Feb-11	5346	5263	5200 CE	5300 CE	63
6	Jan-11	5640	5604	5500 CE	5600 CE	104
7	Dec-10	5900	6102	5800 CE	5900 CE	302
8	Nov-10	6089	5800	6000 CE	6100 CE	-200
9	Oct-10	6075	5988	6000 CE	6100 CE	-12
1	Sept-10	5945	6030	5800 CE	5900 CE	230
1	Aug-10	5453	5478	5300 CE	5400 CE	178
1	July-10	5376	5409	5300 CE	5400 CE	109
1	June-10	5138	5321	5000 CE	5100 CE	321
1.	May-10	5018	5004	4900 CE	5000 CE	104
1.	Apr-10	5200	5254	5100 CE	5200 CE	154
1	Mar-10	5122	5260	5000 CE	5100 CE	260
1	Feb-10	4838	4860	4700 CE	4800 CE	160
1	Jan-10	5239	4867	5100 CE	5200 CE	-233
1	Dec-09	4990	5201	4900 CE	5000 CE	301
2	Nov-09	5041	5006	4900 CE	5000 CE	106
2	Oct-09	5163	4751	5100 CE	5200 CE	-349
2	Sept-09	4811	4987	4700 CE	4800 CE	287
2	Aug-09	4500	4688	4400 CE	4500 CE	288
2	July-09	4442	4571	4300 CE	4400 CE	271
2	June-09	4542	4242	4400 CE	4500 CE	-158
2	May-09	4290	4337	4200 CE	4300 CE	137
2	Apr-09	3400	3478	3300 CE	3400 CE	178
2	Mar-09	2713	3082	2600 CE	2700 CE	482
2	Feb-09	2917	2788	2800 CE	2900 CE	-12
3	Jan-09	2815	2824	2700 CE	2800 CE	124
3	Dec-08	2970	2918	2900 CE	3000 CE	18
3	Nov-08	2833	2758	2700 CE	2800 CE	58
3	Oct-08	3121	2697	2900 CE	3000 CE	-203
3	Sept-08	4092	4111	4000 CE	4100 CE	111
3	Aug-08	4418	4214	4300 CE	4400 CE	-86
3	July-08	4134	4333	4000 CE	4100 CE	333
3	June-08	4555	4316	4500 CE	4600 CE	-184
3	May-08	5118	4836	5000 CE	5100 CE	-164
3	Apr-08	4694	5000	4600 CE	4700 CE	400
4	Mar-08	4582	4830	4500 CE	4600 CE	330
4	Feb-08	5306	5285	5200 CE	5300 CE	85
4	Jan-08	5691	5137	5600 CE	5700 CE	-463

Two strike prices were chosen as follows:

1) At the money point for shorting two calls was chosen with reference to the opening futures price of the entry point. If for instance opening futures price of

Nifty was between or equal to 6000 and 6049, 6000 was chosen as at the money strike price. If for instance it was between or equal to 6050 and 6100, 6100 was chosen as at the money strike price. This was consistent for all the entry points.

2) One strike price before At the money strike price was chosen as In the money strike price for buying the Call Option.

Margin required for shorting (selling) one Call is equal to the margin required for buying / selling 1 Lot of Nifty futures. On an average, 10% margin is required for the same. For instance if Nifty is at 5000, and lot size of Nifty is 50, Rs 25000 was required as Margin, Money (10% of 5000x50). If an In the Money Call is bought and another call is sold (as in our case), Brokers don't charge Margin for Purchase of In the Money Call, and charge only 50% of the Margin required for shorting additional call. Thus, in our example, total margin required for creating a Ratio spread comes out to be Rs 25000 + 50% (Rs 25000) = Rs 37500.

It was assumed that the Trader had Rs 50,000 (Decided on the basis of margin required in the beginning of research period, as well as keeping an excess margin of around Rs 7500) in the beginning, and he created one lot of this strategy every month. Excess Margin was kept to finance any kind of losses emerging on Monthly basis. It was decided in the beginning of research that in case of deficit in Margin for a particular month (i.e. the cumulative amount being less than the margin required to invest in one lot), deficit amount would be shown as an additional investment, and profitability would be calculated with adjustments made for this deficit amount. In case there is no deficit margin, profitability would be calculated on Rs 50,000. On an average, 11 calendar days were involved as investment period each month (total of 462 calendar days in the whole research period), and hence net annualized return was adjusted accordingly. It was assumed that the trader either invested his amount in some other mode during the remaining period of the month, or kept this investment with him/her.

Brokerage & Taxes are accounted for in the calculations @ Rs 25/ Lot. At entry point, Brokerage & Taxes are charged on all the three call options of the strategy. However, on expiry, Brokerage & Taxes are charged for only in the money Options (at the time of expiry). Traders need not exercise out of the money options and can let them expire without paying Brokerage & Taxes.

6. Tabulation of Results

Table. 3. Profitability calculated for each Monthly series/ Annualized Return/Margin Requirement

- C	<u> </u>	3.6	D 6.7	0 1	D C
S.no	Series	Margin	Profit/	Cumulative Amount	Deficit
		Required (In	Loss	(At the end of F&O	Margin
		Rs)	(In Rs)	Series)	(In Rs)*
1.	June-11	40305	-7300	95700	None
2.	May-11	41505	2750	103000	None
3.	Apr-11	43740	5450	100250	None
4.	Mar-11	40575	-14400	94800	None
5.	Feb-11	40095	4700	109200	None
6.	Jan-11	42300	6950	104500	None
7.	Dec-10	44250	-5100	97550	None
8.	Nov-10	45668	1425	102650	None
9.	Oct-10	45663	925	101225	None
10.	Sept-10	44586	-1900	100300	None
11.	Aug-10	40898	2600	102200	None
12.	July-10	40320	3800	99600	None
13.	June-10	38535	-4500	95800	None
14.	May-10	37635	6550	100300	None
15.	Apr-10	39000	4050	93750	None
16.	Mar-10	38415	-2450	89700	None
17.	Feb-10	36285	3950	92150	None
18.	Jan-10	39293	375	88200	None
19.	Dec-09	37425	-3900	87825	None
20.	Nov-09	37808	6250	91725	None
21.	Oct-09	38723	-275	85475	None
22.	Sept-09	36083	-1400	85750	None
23.	Aug-09	33750	-1400	87150	None
24.	July-09	33315	450	88550	None
25.	June-09	34065	4175	88100	None
26.	May-09	32175	5750	83925	None
27.	Apr-09	25500	2050	78175	None
28.	Mar-09	20348	-14000	76125	None
29.	Feb-09	21378	1875	90125	None
30.	Jan-09	21128	4950	88250	None
31.	Dec-08	22275	3000	83300	None
32.	Nov-08	21248	8300	80300	None
33.	Oct-08	23408	4475	72000	None
34.	Sept-08	30690	6950	67525	None
35.	Aug-08	33135	2575	60575	None
36.	July-08	31005	-2300	58000	None

37.	June-08	34163	1375	60300	None		
38.	May-08	38385	1825	58925	None		
39.	Apr-08	35205	-5850	57100	None		
40.	Mar-08	34365	-3150	62950	None		
41.	Feb-08	39795	11200	66100	None		
42.	Jan-08	42683	4900	54900	None		
43.	Total		45700				
44.	Adjusted Annualized Return (%)						
	72.21%						

^{(*} Initial amount was Rs 50,000. Profit/Loss was added to/subtracted from this amount after every month's expiry. Cumulative amount was the net amount left with Trader at the end of every month's expiry.)

7. Findings and Conclusions

- Net annualized return from this strategy was 72.21%. This is an
 unbelievable return considering there is an additional advantage of Zero
 Downside risk in this strategy. This is much more than any safe mode of
 investment (varied from 7 to 12% in the research period) available to a
 trader/investor.
- Out of 42 F&O series, there were 11 instances (Table 2) in which Nifty fell below the In the Money Call level at which this strategy was created. However, in all except one of these instances, there was a comfortable profit. One such instance was October 2009 where Ratio of entry level premiums of In the Money and At the Money Calls was more than 2:1. Although Nifty fell by 349 points (from Table 2) from the In the Money Strike Price used for Buying Calls, yet the loss was limited to only Rs 275. Traders can either ignore such limited minor losses, or can re-adjust the entry level strike prices so as to create a ratio of premiums of Buying and selling strike price lesser that 2:1. This way, they can convert this strategy to Zero Downside Risk strategy. Thus, we can safely say that this indeed is a Zero Downside Risk Strategy. Theoretically, there were four series (from Table 1, Ratio more than 2:1) in which there was a limited downside risk. There were losses in two of such series VIZ September 2010, and October 2009. We have already discussed October 2009, and loss in September 2010 was because of upside movement of Nifty.
- Out of 42 F&O Series, there were only 14 loss making months, which means that this strategy was profitable in 66.67% months. Thus, a trader can show persistence with this strategy month after month, even if there are a few loss making months

- From January 2008 to October 2008, when Nifty fell from 6200 to 2250, i.e. almost to about one third, investment from this strategy became almost 1.5 times. Thus, this strategy showed excellent results in Bear Phase. It's a myth that this is strategy gives excellent results in a mildly bullish market. It can give excellent results even in a bearish market. Traders can actually convert this strategy in to a Bearish strategy by choosing the Ratio of premiums of Buying and Selling strike prices much lesser than 2:1.
- Huge losses were made from this strategy in March 2009, March 2011 and June 2011. In the first two cases, Nifty rallied more than 450 points from the entry level. In June 2011, although Nifty rallied only about 347 points (From Table 2) from the entry level, Premiums of calls were low because of extremely low Implied Volatility. In low implied volatility, premiums of options are lesser, and with lesser premiums available for shorting At the Money calls, upside profit making range is reduced. Further research should be conducted to calculate the exact impact of Implied Volatility on this strategy.
- There was not a single month in which there was a Margin Deficit.
 However, traders should always keep some spare margin to compensate for potential losses in highly Bullish Months.
- In bear phase, when there is a high chance of a contra short covering rally, traders should avoid entering this strategy at strong support levels of the Stock. Otherwise, they may be caught on the upside.
- Majority of gains from this strategy were made in the first 14 months of this strategy, when the outlook was extremely bearish. In Subsequent period, which witnessed a mildly bullish to extremely bullish phase, returns were average. Bearish phase gave net annualized returns of 222%, whereas the subsequent period gave net annualized returns of only 13% (although returns could have been higher, almost double, had the excess funds been re-employed to create more lots of this strategy). We can easily conclude that this strategy can be one of the best trading strategies in bear phase of the Market. It should also be noted that Implied Volatility is extremely high in Bear phase, and high Volatility probably works positive for this strategy. It should further be noted that in high volatility, premiums of options are more, which created a wide profitability range in this strategy.
- An Investor in Cash segment gets 85% limit of his investment from leading Brokerage houses to trade in Options. For such an Investor, this strategy will be available at Zero additional Investment. His upside risk will also be fully hedged if his investment is in the same stock and such an investment is equal to or more than (in terms of quantity) his exposure in this strategy.

• As the time for entry and exit of this strategy is fixed, and also fixed is the mechanism in which entry needs to be made, traders can use this strategy as a Simple and Systematic trading plan. Even a beginner in the Stock Market can understand and take this trade profitably. Since there is no particular need to track or trade the Stock on daily basis, and also no further analysis is required, part time traders/ investors busy in other professions can enter this strategy without investing much of their precious time.

8. References

Andersen, L., J. Andreasen, and D. Eliezer (2002). Static replication of barrier options: Some general results. *The Journal of Computational Finance* 5 (4), pp. 1–25.

Andreasen, J. (2001). Behind the mirror. Risk 14 (11).

Bardos, C., R. Douady, and A. Fursikov (1998). Static hedging of barrier options with a smile: An inverse problem.

Becherer, D. (2001). Rational Hedging and Valuaton with Utility-Based Preferences. *PhD. thesis*, Technical University of Berlin.

Black, F. and M. Scholes (1973). The pricing of options and corporate liabilities. *Journal of Political Economy*, pp. 81, 399–417.

Breeden, D. T. and R. H. Litzenberger (1978). Prices of state-contingent claims implicit in option prices. *Journal of Business* 51 (4), pp. 621–651.

Broadie, M., P. Glasserman, and S. Kou (1999). Connecting discrete and continuous path–dependent options. *Finance and Stochastics* pp. 3, 55–82.

Carr, P., K. Ellis, and V. Gupta (1998). Static hedging of exotic options. *The Journal of Finance* 53 (3), pp. 1165–1190.

Chandra Parsanna, (2006) *Investment Analysis and Portfolio Management*. 5th Reprint, pp. 497-510, Tata McGraw-Hill, New Delhi.

Derman, E., D. Ergener, and I. Kani (1994). Forever hedged. Risk 7 (9), 139–145.

Fischer Donald and Jordan Ronald (2005). *Security Analysis and Portfolio Management*. 6th Edition, pp. 404-427, New Delhi: Prentice-Hall of India.

Fouque, J., G. Papanicolaou, & R. Sircar (2000). *Derivatives in Financial Markets with Stochastic Volatility*. Cambridge University Press.

Frederick, Randy (2005). Timing your Butterfly Trades, Futures 34, 13 (Oct 2005), pp. 36-38.

Hull, John C. (2006). Options, Futures and Other Derivatives (6th ed.). Pearson Prentice Hall, p. 381.

Madhumati R and Ranganatham M. (2008). *Investment Analysis and Portfolio Management*. 3rd Edition, pp. 412. New Delhi: Dorling Kindersley (India) Pvt. Ltd.

McMillan, Lawrence G. (2002). Options as a Strategic Investment (4th ed.). New York: New York Institute of Finance.

Schachermayer, W. (2001b). Optimal investment in incomplete markets when wealth may become negative. *Annals of Applied Probability* 11 (3), pp. 694–734.

Schweizer, M. (1991). Option hedging for semimartingales. Stochastic Processes and their Applications 37, pp. 339–363.

Sharpe William, Alaxender Gordon, and Bailey Jeffery (2006). Investments. 6th Edition, pp. 601, New Delhi: Prentice-Hall of India.

Taleb, N. (1996). Dynamic Hedging: Managing Vanilla and Exotic Options. John Wiley & Sons, Inc.

Toft, K. B. and C. Xuan (1998). How well can barrier options be hedged by a static portfolio of standard options? *The Journal of Financial Engineering* 7 (4), pp. 147–175.

Zariphopoulou, T. (2001). A solution approach to valuation with unhedgeable risks. *Finance and Stochastics* pp. 5, 61–82.

Websites

www.angelbroking.com

www.cboe.com

www.cbot.com

www.ffsil.com

www.nse.com

www.reliancemoney.com

www.sharekhan.com

www.sharepundit.com

It's Time for Green Banking Management in Romania

Ioana Florentina Savu¹

Abstract: In the current Romanian economic climate banks will have to develop a series of initiatives in order to reduce environmental impact. The article is intended to define banks ecological behavior and establish the role of non – governmental organizations and banking products in bank's ecological management. It focuses on projects that banks can undertake in partnership with environmental organizations such as paper recycling, forestation with employees - volunteers from the banks, "canvas bag", building solar panels and "sustainability tour". For an appropriate environmental behavior, banks should encourage customers to use banking products and services in a friendly environment, opting for green cards, online banking, electronic bank statements, green mortgages, green home equity loans, green commercial buildings loans or green car loans.

Keywords: finance; ecology; recycling; environment

JEL Classification: G21; G32; Q50

1 Introduction

The financial crisis has affected to a greater or lesser extent the entire Romanian economy. In banking it all started in August 2008 when banks began to face a liquidity crisis and at the same time, "invisible", a confidence crisis occurs. The first decision taken by the bank management was to stop bank loans (Budu, 2009, p.79). Simply, Romanian bank employees were not allowed to lend to businesses or individuals. Thus banks have lost many clients since the financial crisis. To overcome the financial crisis and to ensure a balanced and responsible development in all markets where they are present, banks are forced to develop policies of social responsibility. By the actions they carried out, banks must comply with environment and community in which are present, and to provide long-term support to projects and initiatives developed in the area of social responsibility such as: environmental protection, social support activities and cultural projects.

The present paper is structured into four chapters: "What is banks ecological behavior?", "Green banking management in Romania", "The role of N.G.O's in

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developing banks environmental behavior" and "The role of retail banking products in developing environmental behavior".

2. What is Banks Ecological Behavior?

During the specific activity of finance and banking it need to minimize environmental impact by developing bank environmentally friendly behavior. In this direction it is desired the integration of environmental protection considerations, social and ethical issues in the systems and risk management policies. Banks have to develop global risk policy in order to analyze the impact on local communities and environment, for customers in areas such as mining and metallurgy, oil and natural gas, wood and paper industry, defense industry, gambling, hydroelectric constructions.

The whole set of managerial actions taken in connection with: market selection, defining client portfolio, establishing product portfolio, competitive banking services and personnel selection, is directed to an end, which is a bank with a powerful financial behaviour, recognized on market. For banks environmental performance it is specific the harmony created between human and natural factors, daily operations and banks management should reflect this harmony. Banks are forced to move from development based on social and natural resources within the business development in harmony with the environment and society. Banks ecological behaviour development it should be reflected in protecting the environment.

It is desirable to minimize the impact on the environment by reducing and optimizing resource consumption and quantity of waste produced in the banks and by internal education of employees in this regard. The following aspects have an important role: the integrated recycling programs for paper, PET (Polyethylene terephthalate), cardboard, glass, light bulbs, metal or printer cartridges; use of recycled paper products and energy efficient light bulbs; auto closing programs for banks computers outside program hours; video - conferencing systems to help reduce emissions from transport by car or plane; campaigns to increase employees awareness regarding energy and resources consumption, more effectively. Banks are the most important financial institutions, thereby developing ecological behaviour plays an important role in the economic development of Romania.

3. Green Banking Management in Romania

For Romania's current economy it is important that, in everything we do, to consider the environment and climate change occurring. Finances and banking is probably one of the areas you might not think you can do anything about in order

to improve the relationship with the natural environment. But there are many ways throughout we can ensure that money and finances are managed in a "green", ethical way.

"Green banking", as a term, covers several different areas, but in general refers to how environmentally "friendly" the bank is, and how committed to green and ethical policies they are. Each bank in Romania must have an environmental policy in force. Typically, most banks include green and ethical commitments in their manifestos, but there are many differences between these commitments, from bank to bank. An environmental policy should be readily available for view and includes sections on: human rights, arms trade, ecological impact, corporate responsibility, animal welfare and neutrality to the emanations of carbon dioxide.

An essential aspect to green banking is the commitment that, the banks, will put the clients money in ethical investment, in the benefit of the environment. Currently, for most customers is not clear where they invest the money deposited in the bank perhaps in activities with a low reputation such as acquisition of weapons and other war related activities. Appealing to a green bank gives you the reassurance of knowing where your money deposits are. These deposits can be used to finance projects such as producing renewable energy technologies, investments in international organizations for welfare, ecology and human rights. Each green bank must be able to explain to customers which investments will be supported from their deposits and provide a progress report periodically. Given the fact that few romanians manage to escape from the necessity of using banks services, credit cards or insurance, it is preferable that they offer next-generation environmentally friendly financial options such as environmental cars insurance options, green mortgages and other green banking options.

From the ecological point of view, it would seem to be a contradiction in the whole idea of green car insurance, encouraging car use is not an ecological friendly act. After a quick calculation made by the insurer, based on car brand, model, engine size and average annual mileage, allows him to offer to the customers a competitive price, given the carbon dioxide emanations of every car. Although car insurance is very competitive, this unique ecological call for car insurance is likely to become increasingly popular in years to come.

The idea behind green mortgage products is simple; a sustainable approach to buy houses that provides benefits to the environment. Lenders have their own individual approach, so it is important to consider all possible options in order to find the best one. One of the best things about this type of mortgage is that the lenders will often be prepared to look at the sort of eco-friendly building projects, that other financiers will not (Gareth, 2010). Unusual housing construction projects involving unconventional materials and other ecological products can easily find financing from mortgage companies offering green products.

Ethical investments have a central role in the banks ecological activity, most of the money obtained from various players in the financial sectors come from investments and not all business undertaken by these players are necessarily environmentally friendly. Ethical accounts put money into the stocks and shares of green companies, with a careful watch being kept to ensure the standards are maintained (Gareth, 2010). In Romania, the number of banks offering these accounts is quite small, but if the consumers interest for ecological products increases, it is likely to appear in future more and greener banks. As increase the number of customers interested in the economies destination placed in banks, more environmentally friendly financial options may appear in order to facilitate ethical and environmental decisions for a good financial management. Even at this stage of the Romanian economy, consumers that are prepared to investigate the market before making a financial decision, friendly with the environment, should find a convenient financial option.

4. The Role of Non- Governmental Organizations in Developing Banks Environmental Behavior

An environmental partnership developed between banks and non-governmental organizations is one way for banks to get involved in protecting nature. Banks can support various projects of organizations both financially and by involving employees as volunteers.

A project that can be implemented in banks is recycling waste paper collected by bank employees. In the current economic climate from Romania, paper waste from small businesses that generate small quantities represents no interest for specialized collectors. They move to the recycling place only for 1 tone bulk, because a transport for smaller quantities would not be economically viable. In this way small quantities get to the landfill. It is important to create an infrastructure to enable a selective collection of waste at source (not to the landfill), economical sustainable, unpolluted, and to allow people in need to reoriented to functional systems that take into account people.

Transportation may be provided by cargo paper - bicycle, led by disadvantaged people, who needs a job. Meanwhile, through recycling, people in need can get a job. In order to encourage banks environmentally friendly behavior, organizations can offer free paper collection container and communication material with instructions for proper selective collection.

Another ecological project that may involve banks, in collaboration with NGOs, is forestation for the degraded Romanian agricultural land. The project is needed because in the last century, Romania has lost half its forests, degraded lands have reached about 3 million hectares and European funds for 7 years would reach for only 2% from the degraded lands (ViitorPlus – Association for Sustainable

Development, 2011). The whole forestation process should be made according to technical studies under the guidance of forestry specialists. Each employee has the opportunity to participate in volunteer activities as planting and adopting individual one or more trees. It is possible to plant trees whose fruit can be sold by various community associations that are working for the benefit of persons with disabilities. The educational impact for this kind of project is more important than immediate benefits.

"Canvas bag" is another complex project that may involve banks, offering people an alternative to plastic or paper bags, through the production of natural canvas bags. The project must be designed so as to encompass sustainable development: using local resources, organic or natural; are brought social benefits (employees are people in difficulty) and a message of education. Banks can replace the gift bags with canvas bags imprinted with their logo. In this way each bag carrier helps the bank image by free publicity.

Bank employees may be involved, in partnership with environmental organizations, in projects such as building solar panels to heat water or solar collectors, which afterwards can be donated. The project has many benefits because employees will participate in activities that combine teamwork, good mood and active learning on environmental issues, because they discuss about renewable energy and climate change, they learn practical techniques for building solar water heating; panels built by employees can be donated to the local community, for children camps, kinder gardens or schools. Panels built and donated from various employees teambuilding activities can be collected and stored temporarily. With the potential beneficiaries - organizations / institutions partnerships are signed and technical installations projects are carried out for the buildings that will install the panels because are needed between 5 and 20 panels, depending on the number of people using hot water in a building. Foundations / sponsors are searched, to ensure installation cost for the solar heating system, costs for boilers, automation and pipes. These sponsors can be the banks that participated in teambuilding. In the end when the new built system is opened, the sponsors are promoted and the beneficiaries are educated regarding the benefits of the renewable energies.

"Sustainability tour" is another example of a project that may involve banks. In this project city tours specialized in sustainability issues are organized. Environmental organizations can customize tours based on the needs of beneficiaries, both in size (number of participants, time stretching) and in terms of content. Information is offered both as presentations and interactive sessions between the guides and tour participants. Speakers require postgraduate studies in sustainable development and sustainability, as well as extensive experience with public presentations and communication. It can be approached issues such as natural resources and their use (with emphasis on energy and water), sustainable urban development (urban

problems and development strategy), social responsibility, enhancement and protection of cultural and natural heritage, waste management and the regional impact of Bucharest ecosystem, for example. For bank employees, these tours have many benefits because they are an active way, direct and with great impact on an individual basis in order to raise awareness on issues of city sustainability, creates motivation and openness to information and education on issues of environmental and social activity, is an unusual activity, with practical issues for employees involvement in the community (volunteer / education), can be organized in the form of team building, provides a better understanding of the city by the participants, beyond all common image, and provide additional information on the environment in which the financial institution operates.

5. The Role of Retail Banking Products in Developing Environmental Behaviour

In principle the banks role is to provide clients customized solutions depending on the objectives and financial needs. For people who want to be continuously involved in protecting the environment in Romania, banks can add to its product portfolio ecological affinity cards. These cards can be issued in collaboration with national and international environmental organizations. To contribute to the development of environmental behaviour, the bank will give a percentage of the purchases made by customers with the green card, to the collaborating environmental organizations. In this way the Bank supports organizations projects in order to preserve and protect nature in protected areas from Romania such as the Carpathians, the Danube and the Danube Delta. At the same time the bank promotes sustainable socio-economic development and the lifestyle with a reduced environmental impact. The percentage donated to the environmental organizations will be entirely supported by the issuing card bank. With this product, banks offer customers the opportunity to get involved in nature conservation activities and contribute directly to the environmental improving. Users of these cards will be customers who want to give nature a helping hand. Green cards represent an opportunity to communicate to a new public category, the importance of nature conservation for our life and the problems on which environmental organizations focus, in the opened projects. Card holders can have a direct contribution to the protection activities for natural areas from Romania, which they cannot help otherwise. Card holders will receive regular updates on the progress of the projects run by environmental organizations and the opportunities for involvement in their actions.

A new banking service in Romania is "online banking", which is easy to use and can be accessed from anywhere. This service, via computer, replace the-counter banking services which not involve cash deposit or lifting cash. Benefits of online

banking include less paperwork, less mail and less driving to branch offices, which all have a positive impact on the environment. Interestingly, online banking can also increase the efficiency and profitability of a bank. A bank can lower their own costs that result from paper overload and bulk mailing fees as more customers use online banking.

Considering the improvement of electronic platforms, banks should guide their customers to change their mindset and stop traditionalist concerns such as online transactions are no safe. Furthermore, banks need to hold promotions to popularize online banking service on a regular basis. In this way, through online banking site, a service without waste paper, the bank may reduce its number of employees, space activity, the level of stress that occurs sometimes and banks can reduce operational costs. Intensive management can be accomplished with a reduced number of staff and high efficiency which offers a new opportunity for growing ecological behaviour. Banks should encourage customers to use banking products and services in a friendly way with the environment, opting for electronic bank statements and online banking as often as possible. Online savings account and mobile banking represents the easiest ways that a customer can do his part in order to help the environment. Green banking includes setting up direct deposit to receive pay checks, electronic statements and to pay bills online (Money Rates, 2009). In this way, the amount of paper produced by one bank can be reduced drastically. Online banking and mobile banking are effective ways to keep track of clients' finances and to avoid late payment fees.

Another green banking step for clients is to suggest that the company they are working for to sign up for a product called "Remote Deposit". This service is offered by banks to their commercial customers (Synergistic Premier Banking, 2011). Remote deposit is the digital scanning and processing of checks, instead of having bank customer have to physically deliver each check to their bank to make a deposit.

For retail banking sector there are products such as Green Mortgages, Green Home Equity Loans, Green Commercial Buildings Loans or Green Car Loans that are quite new for the most traditional Romanian banks. Banks can also choose to provide green mortgages by covering the cost of switching a house from conventional to green power, as well as include this consumer benefit when marketing the product (UNEP Finance Initiative, 2007). Green Home Equity Loans are sometimes referred to, as "second mortgages", and it can help motivate households to install residential renewable energy (power or thermal) technologies. In designing and offering these incentive-based products, a number of banks can be partners with technology providers and environmental NGO's.

Green Commercial Building Loans represents that loans for buildings, characterized by lower energy consumption (~15-25%), reduced waste and less

pollution than traditional buildings. Some appraisers are now recognizing reduced operating expenses, improved performance and longer lifetimes associated with these green functions and features. Lower project costs improve net operating income, a key factor when evaluating property using the income approach (UNEP Finance Initiative, 2007). Like green mortgages, these loans are more complex than green car loans.

Green Car Loans encourage the purchase of cars that demonstrate high fuel efficiency. Hybrids, electric and even some diesel-powered cars can qualify. For Romania, this green car loans must carry fewer fees and no early payment penalties, in order to be accessed by bank's clients. Innovative vehicle lending can be an ideal niche for smaller financial institutions.

Opportunities in the retail banking sector are the most diverse. For the Romanian market, the real innovation in the area of retail banking is not simply the introduction of new niche green products for retail clients, but the integration of environmental incentives into mainstream offerings.

6. Conclusions

Romanian banking sector is probably one of the areas you might not think you can do anything about, in order to improve the relationship with the natural environment. But there are many ways throughout we can ensure that money are managed in a "green", ethical way. Banks can get involved in projects such as: recycling waste paper, forestation for the degraded Romanian agricultural land, "Canvas bags" project, building solar panels to heat water or solar collectors or "Sustainability tour" project. Banks can save Romanian natural resources by developing environmental partnerships with non-governmental organizations. Through partnerships Green Bank Management seeks out advice from outside experts to gain fresh ideas on new product and services development such as: Green Mortgages, Green Home Equity Loans, Green Commercial Buildings Loans, Green Car Loans, ecological affinity cards or online banking. Romanian Banks should play a pro-active role in order to take environmental and ecological aspects as part of their lending principle which would force industries to go for mandated investment for environmental management, use of appropriate technologies and management systems (Sahoo & Nayak, 2008). In the future, Romanian Government should be involved in cultivating bank's ecological culture, by constructing new financial system and improving the existing financial instruments for ecological protection.

7. References

Budu, I. F. (2009). Career in the bank for collection in times of financial crisis. *Economia Magazine: Management Series*, Vol. (12), No. 1, pp. 79-86.

Gareth, E. (2010). What are Green Finance Options?. *PreventClimateChange Newsletter*. Retrieved February, 2012 from: http://www.preventclimatechange.co.uk/.

Money Rates. (2009). Green banking tips for environmentaly conscious consumers. Retrieved January, 2012 from www.money-rates.com.

Sahoo, P.& Nayah, B. P. (2008). Green banking in India. *Indian Economic Journal*. Delhi. Retrieved December, 2011 from http://www.environmentportal.in/files/green%20banking.pdf.

Synergistics Premier Banking (2011). *Tips of the Week*. Natick- Massachusetts. Retrieved December, 2011 from http://www.synergisticsbanking.com.

UNEP Finance Initiative (2007). *Green Financial Products & Services: Current state of Play and Future Opportunities*. Geneva, Switzerland. Retrieved December, 2011 from http://www.unepfi.org.

ViitorPlus - Association for Sustainable Development (2011). *Projects*. Bucharest. Retrieved January, 2012 from http://www.viitorplus.ro/.

Accounting and Auditing

The Impact of Financial Reporting of Small and Medium Sized Enterprises in Economic Development of Balkan Countries

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Abstract: The importance of internal and external accounting as a source of information for owners and managers of small enterprises and their different stakeholders is steadily growing. It is of crucial importance that the accounting systems applied by small enterprises meet their actual needs, providing necessary information yet avoiding unjustified administrative burden. It is recognised that appropriate accounting information is important for a successful management of a business whether it is large or small. At EU level, accounting legislation is in place for listed companies, i.e. the International Accounting Standards/International Financial Reporting Standards and for non-listed limited liability companies, the Fourth and the Seventh Company Law Directives i.e. the Accounting Directives. However, at EU level there is no accounting legislation applicable to those enterprises which are not listed or are not limited liability companies; in most cases we would be referring to small enterprises. Because of the importance of appropriate accounting information for owners and managers of small enterprises and their different stakeholders, it is considered important to analyse the various accounting systems applied in Member States in the case of non-regulation at EU level.

Keywords: Financial reporting; Small and Medium Sized Enterprises; economic growth; Balkan countries

JEL Classification: M41

1. Introduction

The importance of accounting as a source of information for owners and managers of small enterprises and their different stakeholders is obvious. In the European Union (EU), there is accounting legislation in place for different kinds of companies. As regards listed companies in the EU, we have the International Accounting Standards (IAS)/International Financial Reporting Standards (IFRS) as adopted by the EU (IAS Regulation (EC) N° 1606/ 2002).

Concerning limited liability companies, there are at EU level the Fourth Directive (78/660/EEC) and the Seventh Directive (83/349/EEC), together named the Accounting Directives, which are transposed by Member States into their national

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accounting legislation to become local GAAP (General Accepted Accounting Principles). However, there is no accounting legislation in force at EU level for those enterprises which are not covered by the IAS Regulation and the Fourth and Seventh Directives.

In 2007 the European Commission set out a vision for simplifying EU rules on company law, accounting and auditing in a Communication. In 2009 some elements of the Communication were taken forward by the Commission in a Directive amending the Accounting Directives as regards certain disclosure requirements for medium-sized companies and the obligation to draw up consolidated accounts. In 2009 the European Commission announced that micro entities would be exempted from the Accounting Directives and that in addition a modernisation and simplification of the Accounting Directives would be carried out in the near future.

In 2008 the Directorate General for Enterprise and Industry in the European Commission published an expert group report on "Accounting systems for small enterprises - recommendations and good practices". This report describes e.g. the accounting systems and accounting framework in place for small enterprises not regulated at EU-level and identifies some good practices for these enterprises. On this account, there was obviously a need to find out more about the accounting requirements for SMEs in Europe in the future. (March 1957)

Recently, the governments of the EU Member States have agreed to extend the EU perspective to countries in South East Europe – Croatia, the Former Yugoslav Republic of Macedonia, Albania, Bosnia and Herzegovina, Montenegro and Serbia. At present, among these countries, there are only two candidates for EU membership – Croatia and FYR of Macedonia. Other countries of the region are considered as potential candidate countries (Albania, Bosnia and Herzegovina, Montenegro and Serbia). The EU integration process implies legally binding, sweeping liberalisation measures – not only capital account liberalisation, but investment by EU firms in the domestic financial services and the maintenance of a competitive domestic environment, giving this financial liberalisation process strong external incentives (and constraints).

The integration of potential candidate countries into the enlarged Europe is currently realised through Stabilization and Association Process (SAP) which aims to bring these countries progressively closer to the EU. The centerpiece of the process is a Stabilisation and Association Agreement (SAA), which represents a contractual relationship between the EU and each potential candidate country, entailing mutual rights and obligations. For each of the potential candidate countries of the Western Balkans the Commission of European Communities negotiates SAAs which have three aims: first, to encourage regional cooperation; second to promote economic stabilisation and a swift transition to a market

economy; and third to offer the prospect of EU accession. Thus, SAAs explicitly include provisions for future EU membership of the country involved. These Agreements are similar in principle to the Europe Agreements signed with the Central and Eastern European Countries (CEECs) in the 1990s.

In case of CEECs countries, the prospective EU accession served as the ultimate anchor for financial liberalisation. The EU candidate countries had to fully liberalise their financial system by the time of EU accession at the latest, as the free movement of capital is one of the leading principles of the EU. However, even if the SAAs are based mostly on the EU's acquis communautaire and predicated on its promulgation in the cooperation states legislation, the depth of the policy harmonisation expected by them is less that for EU member states.

Globally, the financial reporting has progressed dramatically over the past 30 years. This current wave of financial globalisation was urged by liberalisation of capital controls in many of developing countries and transition economies, in anticipation of the benefits that cross-border flows would bring in terms of better global allocation of capital and improved international risk-sharing possibilities. With the surge in financial flows, however, came a spate of currency and financial crises5. These developments have provoked an intense debate among both academics and policy circles on the costs and benefits of financial reporting, which has intensified and become more polarised over time. Thus, this article proposes to analyse the potential benefits and potential costs of financial reporting, which could face the potential candidate countries from Western Balkans during integration of their financial systems into the European financial system, as well as into the world financial markets.

2. Financial Sector Restructuring in the Western Balkans

Analytically, any financial system can be divided in three sub-sectors: the banking sector (regrouping the commercial or deposits banks), the non-banking financial institutions (like savings-institutions, insurance companies, private pension funds, mutual funds societies, investment funds) and capital (or financial) markets. Banks act as credit-suppliers from the deposits they collect and funds they borrow from the Central Bank; such specific financing facility is not available to the non-banking institutions. In the majority of transition economies, the role of non-banking institutions in mobilisation and allocation of financial resources was and remained quite negligible during the 1990s, and the same appears in Western Balkans countries, where the banking sector continues to dominate the financial system, managing for over 90% of total financial assets, while capital markets and non-banking financial institutions play only marginal roles (Müller-Jentsch, 2007).

However, the financial sector in the Western Balkans has improved significantly in

recent years and a deep restructuring process has been (and proceeds to be) implemented. This owes to comprehensive reforms by governments and the support of international financial institutions like the IMF, the World Bank, and the EBRD. However, fifteen years ago, financial markets in former Yugoslavia and in Albania were poorly developed. The break-up of Yugoslavia led to the fragmentation of financial services companies, the establishment of new regulatory institutions and a freezing of foreign currency deposits. During the 1990s, pyramid saving schemes in Albania, hyperinflation in Serbia and Montenegro, the wars in Bosnia and Kosovo as well as banking crises in several countries of the region weakened the financial sector. Macroeconomic disturbances, a weak rule of law, a large stock of bad debt and low capitalisation rates further undermined the stability of financial markets.

The inefficiency in the financial sector was also influenced by its underdeveloped structure. It was characterised by domination of the banking sector, while the role of non-banking sector in mobilisation, concentration and allocation of financial resources was almost non-existent. In addition, the majority of banks were insolvent and unable to fulfil the requirements established by prudential norms while the banking balances were burdened by a high level of risky and non-performing loans (Goluboviæ & Goluboviæ, 2005).

As the consequence, the policy agenda during the late 1990s and early 2000s was dominated by efforts to clean up and stabilise the banking industry. Regulatory frameworks have been modernised and financial supervision has been strengthened. The share of bad loans has been reduced dramatically. Privatisation has helped to reduce state ownership in banking down to less than 20 percent in most countries and has attracted foreign banks into the market.

Despite these positive developments cited above, financial markets in the Western Balkans remain small, fragmented, and at an early stage of their development. The general characteristics of this market are: activity on the equity market is considerably lower than activity of the banking sector; majority of the countries are characterised by low liquidity on the capital market, with exchange concentrated on small number of shares of listed companies; and, an increased sensitivity of the financial markets to the movements of speculative capital (Goluboviæ & Goluboviæ, 2005).

Western Balkan banking sector has recently attracted considerable attention from foreign investors through a removal of national restrictions, the liberalisation of market access, and the sale of stateowned banks. The transition process from plan to market economy has proved to be an opportunity for many foreign banks to expand their activities to countries of the region. In the early years of transition, many EU banks set up small representative offices in the Western Balkans in order to serve their home clients who were entering the region. As cross-border linkages

became more familiar with local conditions, they gradually expanded their presence in the region. Now some of them have established branch networks throughout the region and act as "universal banks" that offer a broad range of financial services.

It is notable that the majority foreign-owned banks still retain the highest share of the total assets of the banking system in the region. In 2007, banks with majority of foreign capital, controlled approximately 75% of banking market of Albania, Bosnia and Herzegovina, Montenegro and Serbia. In 2005- 2007, the market share of foreign banks stood at around 90% in Albania. Banks with majority of foreign capital controlled 86.1% of Bosnia and Herzegovina banking market in 2005, 90.3% in 2006 and 91% in 2007. In Serbia, it increased from 37% in 2005 to 75.5% in 2007, due to privatisation and organic growth of the subsidiaries of EU banks. Share of foreign capital, in Montenegrin banking sector, was around 78.8% by the end of 2006.

Owners include international banking groups coming primarily from EU countries (such as Austria, Italy, Greece, France, etc.). Austrian and Italian banks in particular operate across the Western Balkans. For instance, the Austrian investors are dominant in Bosnia and Herzegovina (59% of banking assets in 2007) and in Albania (55% of banking sector in 2005). Greek banks have also entered the region; by mid 2005, they had invested around EUR 750 million in the Western Balkans, half of which in Serbia alone. Since the start of financial system reform, these groups introduced numerous positive changes in the region, improving the performances of the domestic banking sector and providing stable foreign sources of financing domestic credit expansion.

Thus, the process of financial reporting of the Western Balkans has primarily been driven by foreign direct investments (FDI) of EU banks into domestic banking sector. These strategic investors have been a way to strengthen the banking system in the region and to improve the low level of financial intermediation. They brought with them technical know-how, such as modern risk-management and marketing techniques. They tend to raise governance standards, introduce new financial products. They come with the resources to re-capitalise domestic banks and modernise branch networks. Moreover, FDI from the EU also helps the Western Balkan countries to "import" modern prudential regulation from EU. However, there are also some concerns about the growing influence of foreign banks in these regional banking markets. These, mainly, relate to the possibility that foreign banks turn out to be instable sources of bank credit, especially during financial crises or during economic downturns (either in Western Balkan countries or in their home markets).

3. Financial Reporting, Its Potential Benefits and Costs

The IFRS for SMEs is a self-contained standard of 230 pages, designed to meet the needs and capabilities of small and medium-sized entities (SMEs), which are estimated to account for over 95 per cent of all companies around the world.

Because full IFRSs were designed to meet the needs of equity investors in companies in public capital markets, they cover a wide range of issues, contain a sizeable amount of implementation guidance and include disclosures appropriate for public companies. Users of the financial statements of SMEs do not have those needs, but, rather are more focused on assessing shorter-term cash flows, liquidity and solvency. Also, many SMEs say that full IFRSs impose a burden on them - a burden that has been growing as IFRSs have become more detailed and more countries have begun to use them. Thus, in developing the proposed IFRS for SMEs, IASB's twin goals were to meet user needs while balancing costs and benefits from a preparer perspective.

The IFRS for SMEs responds to strong international demand from both developed and emerging economies for a rigorous and common set of accounting standards for smaller and medium-sized businesses that is much simpler than full IFRSs. In particular, the IFRS for SMEs will:

- provide improved comparability for users of accounts;
- enhance the overall confidence in the accounts of SMEs, and
- reduce the significant costs involved of maintaining standards on a national basis.

The IFRS for SMEs will also provide a platform for growing businesses that are preparing to enter public capital markets, where application of full IFRSs is required.

The IFRS for SMEs is separate from full IFRSs and is therefore available for any jurisdiction to adopt whether or not it has adopted the full IFRSs. It is also for each jurisdiction to determine which entities should use the standard. It is effective immediately on issue.

In developing the IFRS for SMEs the IASB consulted extensively worldwide. A 40-member Working Group of SME experts advised the IASB on the structure and content of the IFRS at various stages in its development. The exposure draft of the IFRS, published in 2007, was translated into five languages to assist SMEs in responding to the proposals. More than 50 round-table meetings and seminars were held to receive direct feedback, and the draft IFRS was field-tested by over 100 small companies in 20 countries. As a result, further simplifications have been achieved in the final document.

4. Potential Benefits of Financial Globalisation in Theory

In small enterprises there can be different kinds of accounting systems such as external, internal and tax accounting. Annex 3 summarises data per Member State concerning accounting system requirements for small enterprises. On the basis of this data, the following descriptions of accounting systems are given:

Internal accounting, also called management accounting is based on the enterprise's internal accounting procedures and recorded accounting information. Internal accounting is intended for managers within organizations, to provide them with the economic basis to make informed business decisions that would allow them to be better equipped in their management and control functions. For example, managers may want to be able to assess the contribution or the profitability of different products or services that they supply by comparing the revenues and costs that they generate. Unlike external accounting information, internal accounting is usually confidential and it is accessible only to the management. In most cases, small enterprises do not use internal accounting at all due to their size. Internal accounting is normally not governed by national legislation. However, in some Member States internal accounting is compulsory even for small enterprises.

External accounting, also called financial accounting is concerned with the preparation of financial statements for decision makers, such as the owners, suppliers, banks, governments and its agencies, customers and other stakeholders outside the enterprise. Regarding formats for financial statements see chapter 7. External accounting makes use of the accounting information from the internal accounting system. In the preparation of the external accounting, the small enterprise may be governed by local

GAAP. Some Member States have introduced external accounting rules for small enterprises, while others have no accounting rules in place and leave it to the enterprises themselves to decide which accounting systems they consider to be appropriate for their particular circumstances and business environment.

Tax accounting is normally based on the external/financial accounting system. There may be differences between the profits for tax purposes and the profits per the accounts. Tax authorities often ask for additional adjustments to be made to the profits per the accounts and these are captured in a "tax computation". Some examples of adjustments which are quite common between profits per accounts and tax profits:

- Depreciation differences;
- Accruals;
- Expenses which are disallowed for tax purposes;
- Non-taxable income.

In some Member States, taxation is carried out on a cash basis accounting system, in which case further adjustments (when the enterprise uses accrual basis accounting) like accruals, unrealised income and unrealised expenses are to be made to the enterprise's results before the tax computation.

Since the financial sector in the Western Balkans is bank-dominated, it seems important, for us, to pay more attention to the benefits that can bring foreign participation in the local bank sector. Theoretically, foreign bank participation can generate a variety of benefits (Levine, 1997, 2005). First, foreign bank participation can facilitate access to international financial markets. Second, it can help improve the regulatory and supervisory frameworks of the domestic banking sector. Third, it can improve the quality of loans, as the influence of the government on the financial sector should decline in more open economies. Fourth, in practice, foreign banks may introduce a variety of new financial instruments and techniques and also foster technological improvements in domestic markets. Fifth, the entry of foreign banks tends to increase competition, which, in turn, can improve the quality of domestic financial services as well as allocative efficiency. Sixth, the presence of foreign banks can also provide a safety valve when depositors become worried about the solvency of domestic banks. Finally, foreign banks entry enhances legislative framework, financial monitoring, reduces corruption and stimulates the development of transparent intermediary operations (De Haas & Van Lelyveld, 2003).

Even if theoretical models have identified a number of channels through which international financial reporting can help to promote economic growth, and on the surface, there seems to be a positive association between embracing financial globalisation and the level of economic development11, it is quite difficult to empirically identify a strong and robust causal relationship between financial reporting and growth, especially for developing countries (Eichengreen, 2000; Prasad and al., 2003). Besides, many of empirical papers have often found mixed results, suggesting that the benefits are not straightforward.

One of the reasons for the lack of consensus can be ascribed to the difficulty in properly measuring the extent of financial reporting (Chinn & Ito, 2007). Although many measures exist to describe the extent and intensity of capital account controls, it is generally agreed that such measures fail to capture fully the complexity of real-world capital controls for a number of reasons12. In fact, we can distinguish three main measures of the extent of financial reporting: de jure measures (that capture the legal restrictions on cross-border capital flows based on data from IMF's AREAER13); de facto measures which includes the price-based measures (CIP, UIP and RIP14) and the quantitybased measures (based on actual flows); another de facto measure of financial reporting is savinginvestment correlation (Feldstein & Horioka, 1980). Apparently, the distinction between de jure and de facto integration appears to matter a great deal in understanding the

macroeconomic implications of financial globalisation. The basic problem with de jure measures is that implementation and enforcement differ so greatly across countries that international comparisons are doubtful. Consequently, even if most empirical papers analysing the effects of financial reporting rely on de jure measures, de facto integration measures may be more appropriate for analysing the direct and indirect benefits of financial reporting.

An alternative line of inquiry into the effects of financial globalisation is based on the notion that not all capital flows are equal. Flows like Foreign Direct Investment (FDI) and, perhaps, international portfolio flows are not only presumed to be more stable and less prone to reversals (Wei, 2006), but are also believed to bring with them many of the indirect benefits of financial globalisation such as transfers of managerial and technological expertise. Thus, the composition of capital inflows can have an important influence on the benefits of financial reporting for developing countries as well as for transition countries.

Finally, it seems that is not just the capital inflows themselves, but what comes along with the capital inflows that drive the benefits of financial reporting for developing and transition countries (Kose and al., 2006). There is considerable evidence that financial reporting serves as an important catalyser for a number of indirect benefits, which M. Kose and al. (2006) name potential "collateral benefits" since they may not generally be the primary motivations for countries to undertake financial reporting. They could include development of the domestic financial sector, improvements in institutions (defined broadly to include governance, the rule of law, etc.), better macroeconomic policies, etc. These collateral benefits then result in higher growth, usually through gains in allocative efficiency.

The accounting framework lays down the concepts and principles that are the basis for preparing and presenting the external financial statements of an enterprise. These principles may not necessarily be applicable in all Member States to all enterprises all the time because of e.g. the size of the enterprise or different user's needs. Therefore, each enterprise needs to decide which principles it considers most important and applicable to its particular circumstances and business environment. (Kose and al., 2006).

5. Potential Costs of Financial Reporting

In spite of its beneficial effects, financial reporting can also be dangerous, as it has been witnessed in many past and recent financial, currency and banking crises. It can make countries more vulnerable to exogenous shocks. In particular, if serious macroeconomics imbalances exist in a recipient country, and if the financial sector is weak, be it in terms of risk management, prudential regulation and supervision,

large capital flows can easily lead to serious financial, banking or currency consequences.

In fact, the experience of the past three decades has led economists and policy makers to recognize that, in addition to the potential benefits discussed above, open financial markets may also generate significant costs. Such potential costs include a high degree of concentration of capital flows and a lack of access to financing for small countries (either permanently or when they need it most); an inadequate domestic allocation of these flows (which may hamper their growth effects and exacerbate pre-existing domestic distortions); a loss of macroeconomic stability; a pro-cyclical nature of shortterm capital flows and the risk of abrupt reversals; a high degree of volatility of capital flows (which relates in part to herding and contagion effects); and risks associated with foreign bank penetration (Agénor, 2001).

Again, since financial sector of Western Balkan countries is bank-dominated, we would like to point out the potential "danger" of presence of foreign bank on the domestic financial sector. Although foreign bank penetration can yield several types of benefits (as discussed earlier), it also has some potential disadvantages as well.

First, foreign banks may ration credit to small firms to a larger extent than domestic banks, and concentrate instead on larger and stronger ones. If foreign banks concentrate their lending operations only to the most creditworthy corporate borrowers, their presence will be less likely to contribute to an overall increase in efficiency in the financial sector. More importantly, by leading to a higher degree of credit rationing to small firms, they may have an adverse effect on output, employment, and income distribution (Agénor, 2001).

Second, entry of foreign banks, which tend to have lower operational costs, can create pressures on local banks to merge in order to remain competitive. Furthermore, the process of concentration (which could also occur as foreign banks acquire domestic banks) could create "too big to fail" banks. A toobig- to-fail problem may, in turn, increase moral hazard problems: knowing the existence of an (implicit) safety net, domestic banks may be less careful in allocating credit and screening potential borrowers (Agénor, 2001). Concentration could also create monopoly power that would reduce the overall efficiency of the banking system and the availability of credit. In particular, a high degree of banking system concentration may adversely affect output and growth by yielding both higher interest rate spreads (with higher loan rates and lower deposit rates relative to competitive credit and deposit markets) and a lower amount of loans than in a less concentrated more competitive system.

Third, entry of foreign banks may not lead to enhanced stability of the domestic banking system, because their presence per se does not make systemic banking crises less likely to occur – as it may happen if the economy undergoes a deep and prolonged recession, leading to a massive increase in default rates and an across-the-board increase in no performing loans, and because they may have a tendency to "cut and run" during a crisis (Agénor, 2001).

6. Conclusions

Small enterprises may use simplified formats for financial statements i.e. for the balance sheet and the profit and loss account. Depending on the business environment in which the enterprise operates, it can choose the format of the profit and loss account i.e. by nature or by function. Normally the financial statements would be prepared once a year when the tax declaration has to be provided.

A projected cash flow statement can be very useful for small enterprises because the cash management of a small enterprise is especially important. Cash flow projections are partly based on information from the accounting systems of the enterprise. Cash management becomes especially important in situations when the economy is heading for a downturn.

To help speed up and professionalize negotiating loans, it is useful to agree on binding standards about form and contents of information provided between SME-organizations and banks. Small enterprises and banks gain transparency about the scope and the quality of the information. The bank guarantees a decision within a short period. (e.g. 10 days).

The SME-organization may offer support to the small enterprise in the preparation of the records and the negotiations

The accounting systems in place for small enterprises in Member States vary a lot. There are cases when there are no accounting requirements at all and cases where the accounting requirements are relatively strict for small enterprises. However, in practical terms, all small enterprises will need to keep some kind of financial records in order to keep financial control over their businesses. This report summarises the likely accounting systems from the point of view of small enterprises in Member States and identifies some good practices on how to improve the accounting systems for small enterprises.

The objective of this report is to provide views on how to improve the accounting systems so that they can provide the owners/managers of the small enterprises with appropriate financial information. The aim is not to add to regulation but to identify good practices which small enterprises may consider before deciding on an appropriate accounting system. However, these recommendations are in no way intended to encroach upon the sovereignty of Member States in accounting matters.

7. References

Agénor, P-R. (2001). Benefits and Costs of International Financial reporting: Theory and Facts. World Bank. *Policy Research Working Paper* No. 2699.

Bhagwati, J. (1998). The Capital Myth. The Difference Between Trade in Widgets and Dollars. *Foreign Affairs*, Vol. 7, no. 3, pp. 7-12.

Chinn, M. Ito, H. (2007). *A New Measure of Financial Openness*. May, 2007. http://web.pdx.edu/~ito/.

De Haas, R., Van Lelyveld, I. (2003). Foreign Banks and Credit Stability in Central and Eastern Europe: Friends or Foes? *MEB Series no. 2003-04, Research Series Supervision* No. 58 De Nederlandische Bank, http://www.dnb.nl.

Eichengreen, B. (2001). Capital Liberalization: What Do Cross-Country Studies Tell Us? *The World Bank Economic Review*, Vol 15, No. 3, pp. 341-365.

Feldstein, M., Horioka, C. (1980). Domestic Savings and International Capital Flows. *The Economic Journal*, Vol. 90, No. 358, June 1980, pp. 314-330.

Fischer, S. (1998). Capital Account Liberalization and the Role of the IMF. in Should the IMF Pursue Capital Account Convertibility? *Essays in International Finance, Department of Economics*. Princeton University, Vol. 207, pp. 1-10.

Goluboviæ, S., Goluboviæ, N. (2005). Financial Sector Reform in the Balkan Countries in Transition. Financial Systems Integration of Balkan Countries in the European Financial System, Facta Universitatis, Series: Economic and Organisation, Vol. 2, No. 3, pp. 229-236.

Henri, P.B. (2000). Stock Market Liberalization, Economic Reform, and Emerging Market Equity Prices. *Journal of Finance*, Vol 55 (April), pp. 52-64.

Klein, M., Olivei, G. (1999). Capital Account Liberalization, Financial Depth, and Economic Growth. *NBER Working Paper* No. 7384.

Kose, M.A., Prasad, E.S., Rogoff, K., Wei, S-J. (2006). Financial Globalization: A Reappraisal. *IMF Working Paper*. WP/06/189.

Levine, R. (1997). Financial Development and Economic Growth: Views and Agenda. *Journal of Economic Literature*, Vol. 35, No. 2, p. 688–725.

Levine, R. (2005). Finance and Growth: Theory and Evidence. http://www.econ.brown.edu.

Mathieson, D., Roldós, J. (2001). The Role of Foreign Banks in Emerging Markets. Third Annual Conference on Emerging Markets Finance. World Bank, IMF, and the Brookings Institution, April 19-21, 2001.

Müller-Jentsch, D. (2007). Financial Sector Restructuring and Regional Integration in the Western Balkans." Office for South East Europe, European Commission – World Bank. http://wwwwdsworldbank.org.

Obstfeld, M., Rogoff, K. (1998). *Foundations of International Macroeconomics*. Cambridge, Massachusetts: MIT Press.

Prasad, E.S., Rogoff, K., Wei, S-J., Kose, M.A. (2003). Effects of Financial Globalization on Developing Countries: Some Empirical Evidence. *International Monetary Fund* (FMI). March 17.

Rodrik, D. (1998). Who Needs Capital-Account Convertibility? http://ksghome.harvard.edu.

Stiglitz, J. (2002). Globalization and Its Discontents. New York: W.W. Norton and Company.

Summers, L.H. (2000). International Financial Crises: Causes, Prevention, and Cures. *American Economic Review*, Vol. 90, No. 2, pp. 1-16.

Syssoyeva (Masson), I. (2008). Capital Account Liberalization in the New Member States of the European Union and Financial reporting in the Enlarged Europe. *Presented at the 1st Doctoral Meeting of Montpellier (D.M.M.)*, February 27th-29th, 2008, Montpellier, France, (unpublished).

Wei, S-J. (2006). Connecting two views on financial globalization: Can we make further progress? *Journal of Japanese and International Economies*, 20 (2006), pp. 459–481.

The IASB and FASB Convergence

Process: Current Developments

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Abstract: The importance of harmonization of accounting standards is now widely accepted all over the world. The increased international movement of investments has strongly forces the harmonization of the various national accounting standards in a uniform financial reporting system accepted worldwide. Recently the Securities and Exchange Commission has agreed to remove the requirement of international firms reporting under International Financial Reporting Standards (IFRS) and listed in the U.S to provide reconciliation to U.S. Generally Accepted Accounting Principles (GAAP). This recent move of the Securities and Exchange Commission indicates that U.S. financial reporting is likely to converge with IFRS in the near future. The International Accounting Standards Board (IASB) and the Financial Accounting Standards Board (FASB) are currently working together so as to converge their existing accounting standards into a common set of international accounting standards. The objective of this paper is to discuss the FASB and IASB convergence process by addressing current developments regarding significant topics that were deemed critical to this convergence. The convergence of GAAP and IFRS seems inevitable. Mixed opinions have been voiced about this convergence process. Many have begun to consider obstacles that is possible to lay ahead as well as the possible costs and benefits of such a move to the IFRS.

Keywords: International accounting; accounting harmonization; principle-based; rule-based standards

JEL Classification: M40; M41

1. Introduction

The variation of the financial reporting systems among countries is caused by many factors that affect the development of accounting system in each country. The type of legal system, type of political system, level of education, the extent of economic development and other environmental factors in addition to the culture of the country are regarded as significant factors that cause this variation of the financial reporting systems among countries. For example, the development of accounting standards in the United States was affected by the Industrial Revolution and the

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need to obtain capital from private sources. As a consequent, users of the financial statements such as investors and creditors required financial accounting information so as to make relevant decisions regarding their investments in the entity. Thus, financial accounting standards in the United States have been developed mainly in the private sector, and the result has been restrictive set of accounting standards. (Schroeder et al. 2009, p. 77). This model of financial reporting is referred to as the Anglo-Saxon financial reporting system. The Anglo-Saxon financial reporting system focuses on the flow of financial information to the financial markets and the relationship between the business and the external users of the financial statements mainly the investors. Thus, the Anglo-Saxon financial reporting approach regards the investor as the main provider of the financial resources of the entity. However, government still uses financial reporting as a means of regulating economic activity. For example, the purpose of the SEC's is to protect the investor and make sure that the securities markets are being run efficiently (Epstein & Jermakowicz, 2010, p. 4).

The other system of financial reporting is 'the continental Europe" or 'the code law' financial reporting system that was evolved primarily in Europe. The 'code law' financial reporting system can be traced back to 1870 after the unification of Germany. The code law model focuses mainly on moving away from market values to historical cost and systematic depreciation. It was used subsequently and mostly in the early twentieth century, by governments for the determination of tax when taxes on business profits started to be introduced (Epstein & Jermakowicz, 2010, p. 4). This happened since primary accounting regulation in the European countries was set by the government for the purpose of protecting the economy from bankruptcies.

This variation in the financial reporting systems among countries, may hinder the flows of the capital investments among countries worldwid. In order to be able to evaluate an investment in other country in a proper manner, an investor has to convert or reconcile the financial statements prepared under a foreign set of accounting standards into financial statements in conformity with the national accounting standards of the investor's home country and this may result in substantial differences. For example, in 1993, when German multinational company Daimler-Benz decided to apply for listing on the New York Stock Exchange, the company had to convert its financial statements to be in accordance with US GAAP. At that time, Daimler-Benz reported profit of 615 million German Deutsche Mark under German national accounting standards but a loss of 1839 million German Deutsche Mark under US-GAAP (Hellmann et al. 2010, p.108). The increased global move of capital has strongly forces the harmonization of the diverse national accounting standards in a global financial reporting standards. It has become common for institutions and individuals to invest outside of their home country. For example, approximately two-thirds of U.S. investors own securities of foreign companies. Similarly, many firms now list on one or more foreign financial markets in addition to listing on the financial markets in their home countries (Erickson et al. 2009, p.531).

Internationally, the establishment of the International Accounting Standards Committee (IASC) is regarded as a milestone in the move toward accounting harmonization. The IASC was established in 1973 as an independent private sector body whose main goal was to achieve uniformity in accounting principles by developing international accounting standards. The original board members of the IASC was consisted of the professional accounting bodies of nine countries, Canada, Australia, Japan, France, the United Kingdom, Maxico, the Netherland, the United States, and West Germany. (Schroeder et al. 2009. P.82). In 2001, the IASC was restructured and replaced by the International Accounting Standards Board (IASB). The main goals of the IASB are (1) to develop a uniform set of high quality, understandable, enforceable and worldwide accepted international financial reporting standards (IFRSs); (2) to promote the use and application of those set of standards; (3) to take account of the financial reporting requirements of emerging countrys' economies by developing a set of IFRSs for the small and medium-sized entities (SMEs): (4) and to achieve convergence of national accounting standards and IFRSs. (IASB, www.iasb.org). Since 1973 until 2001, the IASB and its predecessor organization (the IASC) have issued 41 accounting standards (12 have subsequently been superseded). These standards were previosly known as International Accounting Standards (IAS) and are now called International Financial Reporting Standards (IFRS). Until now, the IASB has issued 13 IFRSs (IASB, www.iasb.org).

The efforts of the IASB have resulted in the adoption of IFRS by a large number of countries all over the world. IFRS adapted by more than one hundred countries for compulsory or optional financial reporting by public or private organizations, with many further adoptions scheduled to take place over the next few years. (Epstein and Jermakowicz, 2010, p. VII). Additionally, On November 2007, the Securities and Exchange Commission (SEC) agreed to remove the requirement for non U.S. companies reporting under IFRS to provide reconciliation to U.S Generally Accepted Accounting Principles (GAAP) so as to facilitate listings of international firms (Chen & Samı 2008, p. 15). By the same way, the SEC effectively recognized IFRS as a set of high quality accounting standards which satisfied the information needs of U.S. investors (Carmona and Trombetta, 2010, p.2). The SEC also considers allowing U.S. national firms to choose between IFRS and U.S GAAP in the future. In August 2008, the SEC issued a "Proposed Roadmap" that could result in requiring U.S. accounting setting bodies to use IFRS as issued by the IASB starting from 2014.

The IASB and FASB are currently engaged in several projects in order to attain a uniform set of International accounting standards. The primary objective of this

paper is to discuss the convergence process of the IASB and FASB standards by addressing significant current issues on this convergence. The remainder of this paper is organized as follows. The second section introduces principle based and rule based accounting standards. Section three presents the IASB-FASB convergence Project. The fourth section discusses significant current issues on the convergence of the IFRSs and the U.S. GAAP and the last section draws some concluding remark.

2. Principle Based versus Rule Based Standards

According to a widely-held view, it is generally accepted that U.S. accounting standards are more described as 'rules-based standards' and IASB's standards tend to be closer to 'principles-based standards'. The U.S. rule-based reporting system is said to be too difficult because there is too much detailed guidance for every set of standard. Schipper, 2003 argued that U.S. financial reporting standards are in general based on principles, which are derived from the FASB's conceptual framework. However, they also include components such as detailed implementation guidance that make them look closer to rules-based. Moreover, a great deal of these details comes from explanations of how to apply the standards an even, sometimes, by illustrating numerical examples. Schipper also indicated that the perceived benefit of the more detailed implementation guidance of accounting standards is greater comparability of financial statements among entities. A good example of a rules-based standard can be noticed in the FASB's Statement of Financial Accounting Standards (SFAS) No. 13, "Accounting for Leases". SFAS 13 determines four criteria that should not be violated if a lease is to be recognized as an operating lease. As a consequence, the leasing entities and lessees attempt to structure lease agreement in order not to violate these four criteria (Schroeder et al. 2009, p. 59). Therefore, companies have been able to structure and interpret lease contracts to avoid capitalization, which tends to present a more favorable picture of a company's overall financial condition. As a result, this rule based standard helps companies to use leasing as a means of off balance sheet financing, in addition to providing justification for this accounting chioce (Shortridge & Myring, 2004).

The FASB provided such a detailed guidance of accounting standards because in the U.S. many external auditors and financial statements preparers are afraid of litigation so they required this. In addition, the FASB have developed rules-based standards in order to meet the demand of the entitys' management and external auditors who need a clear and detailed answers to every accounting issue so as to aviod misunderstanding, by SEC or the public, of the application of the accounting standards. However, The complexity to employ and interpret these set of rules-based standards has increased over time and thus requiring more detailed guidance

to be understandable. As these standards are rule-based, it is more costly because it need more efforts for auditors and preparers of thr financial statements to keep up with the continuous developments. (Clay, 2007, p. 3)

As a consequence to that in addition to the occurance of series of financial scandals that rocked the business world in 2001-2002 (the most famous case is the collapse of Enron and World Com in the US that was followed by the collapse of their external auditors Arthur Andersen) the US generally accepted accounting standards was subjected to intense criticism. As a response to that the Sarbanese Oxley Act of 2002¹ required the SEC to conduct a study on 'the adoption by the United States financial reporting system of a principles-based accounting system'. The Securities and Exchange Commission (SEC) submitted to congress its study addressing this matter in 2003. The study provided the following recommendations to the Financial Accounting Standards Board (FASB, 2004):

- 1. The FASB should issue objectives oriented accounting standards;
- 2. The FASB should address deficiencies in its conceptual framework;
- 3. The FASB should be the only organization which is responsible for issuing authoritative accounting guidance in the United States;
- 4. The FASB should continue its convergence efforts;
- 5. The FASB should work to redefine the GAAP hierarchy;
- 6. The FASB should increase access to authoritative literature;
- 7. The FASB should perform a comprehensive review of its literature in order to determine accounting standards that are more rules-based and adopt a transition plan to change those standards.

The FASB responded to the recommendations provided by SEC's study and indicated that number of those recommendations were already being implemented. Tha FASB also noted that it is committed to continuously developing its standard-setting process. The FASB's specific responses to the recommendations of the SEC's study are as follows (FASB, 2004):

- 1. Issuing objectives oriented accounting standards;
- 2. Conceptual framework improvements project;
- 3. One U.S. standards setter;

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¹ "Corporate and Auditing Accountability, Responsibility, and Transparancy Act" passed by the US Congress in 2002. Its commonly called the Serbanes Oxley (SOX) Act. The Serbanes Oxley Act formed the Public Company Accounting Oversight Board (BCAOB), which is appointed and overseen by the Securities and Exchange Commission. The responsibility of the PCAOB is to; provide oversight for the auditors of the publicly held companies, set auditing and quality control standards, and perform inspections of the quality controls at auditing firms.

- 4. International convergence;
- 5. GAAP hierarchy;
- 6. Access to authoritative literature;
- 7. Comprehensive review of literature.

In contrast, as stated earlier, the IASB standards are based more on principles. Principles-based standards provides a conceptual basis that represents principles for preparers of the financial statements to follow instead of issuing a detailed rules (Shortridge & Myring, 2004). For example, IASB has six pronouncements and one interpretation addressing accounting for leases while FASB HAS seventy eight including various interpretations and pronouncements (Shortridge, 2004).

Thus, principles-based accounting standards are regarded as a fundamental understandings and conceptual basis that form transactions and economic events. In the principles-based standards accounting, these fundamental understandings and conceptual basis, dominate any other rule included in the set of standards (Dennis, 2008, p. 261). Additionally, principle based standards leave the judgment more to the financial statements preparers and allow different accounting choices. For example in International Accounting Standards (IAS) No. 16 'Property, Plant and Equipment' the IASB allows the companies to use either the cost model or the revaluation model for the purpose of measuring property, plant and equipment after recognition. (IAS, 16/29)

When the rule based standards are employed, focus on detailed rules will result in accounting treatments that comply with the letter of the rules rather than spirit which is seems to be against the 'substance over form' concept of accounting. Therefore, it was described by (Alexander and Jermakwicz (2006) as 'the cookbook approach'. Under the rules-based accounting standards, there are possibilities for entities to manipulate their financial information by concentrating on the form of the accounting treatments rather than substance of the transactions. For example, Enron used special purpose entities in order to present less debt in its financial statements than the company actually had. Enron was able to manipulate the rules so as to show the financial picture of the company in a misleading manner (Schroeder et al. 2009, p. 19). Therefore, the principles-based standards, which contain limited interpretive and implementation guidance of the accounting standards, are the perceived solution to problems caused by rules-based standards. The US is among the majority of countries currently employing the rule-based standards of accounting. A shift to international standards of accounting that are based on principles has gained momentum recently. The FASB and the IASB are working together on the convergence of their accounting standards so as to provide a set of accounting standards that are expected to be a solution to the poor financial reportings. This convergence project can be traced back to 2002 when FASB and IASB signed their agreement in Norwalk. This agreement is now known as the Norwalk Agreement and the two standard setting bodies agreed to converge their accounting standards as quickly as possible. The boards plan to conduct joint project and acknowledged their commitment to the development of high quality, compatible accounting standards (Schroeder et al. 2009, p. 63). The FASB and IASB convergence project is discussed in next section

3. The IASB-FASB Convergence Project

The IASB and FASB are currently working together so as to accomplish a single set of International Accounting Standards. Among their efforts are Norwalk Agreement and the Roadmap to Convergence. In October 2002, the FASB and the IASB announced the issuance of a memorandum of understanding, known as Norwalk Agreement, marking a important step toward the convergence of U.S. GAAP and International Accounting Standards. Both standard setting bodies acknowleged their commitment to the development of high –quality compatible accounting standards that can be used nationally and internationally for the purpose of financial reporting. In this regard, the FASB and IASB agreed to:

- Undertake a short-term project for the purpose of removing a the individual differences between U.S. GAAP and IFRSs:
- Working mutually and concurrently on an individual significant projects in order to remove other differences between IFRSs and U.S. GAAP that will remain as of January 1, 2004;
- Continue progress on current joint projects;
- Encourage their respective interpretative bodies to coordinate their activities. (Schroeder et al. 2009, p. 97).

In 2006 the IASB and FASB confirmed their commitment to the convergence process by signing up a 'Memorandum of Understanding' (MoU) and outlined a 'roadmap' for arriving at a unified set of high quality international accounting standards for use in the capital markets worldwide. The MoU, which identified a definite step forward in the convergence process, listed 11 topics that are regarded critical to the convergence process. These topics are, fair value measurement guidance, revenue recognition, consolidation, liabilities and equities distinction, business combinations, performance reporting, post retirement benefits, derecognition, financial instruments, intangible assets, and leases (Carmona and Trombetta, 2010, p. 2).

On November 15, 2007, the Securities and Exchange Commission (SEC) agreed to remove the requirement for non U.S. companies, which are reporting under IFRS and registered in the U.S capital markets, to provide reconciliation to U.S GAAP in

order to facilitate listings of the internationa corporations (Chen and Samı, 2008, p15). In this way, the SEC considered IFRS as a set of high quality accounting standards which are satisfactory to the U.S. investors form making relevant decisions. (Carmona S, Trombetta M, 2010, p.2). This has been supported by empirical studies recently which concluded that U.S investors perceive accounting information prepared in conformity with IFRS and U.S. GAAP to have similar quality even though there are differences between the two sets of standards (Kim et al. 2011; Leuz, 2003).

Furthermore, the SEC went further to consider allowing U.S. national firms to choose between IFRS and U.S. GAAP in the future (Chen and Samı, 2008, p16). This SEC's important step is welcomed by the IASB, international firms reporting under IFRSs, and major financial markets in U.S. (Kim et al. 2011, p.1). In contrast, some studies concluded that significant differences exist between results reported using IFRS versus U.S. GAAP in spite of the convergence and that the reconciliation from IFRSs to to U.S GAAP provides value-relevant information to investors (Chen & Sami, 2008; Henry et al. 2009).

In August 2008, the SEC issued a "proposed roadmap" that could result in requiring U.S. standards setters to use IFRS starting from 2014 (SEC, 2008). The FASB and IASB reconfirmed their commitment to convergence at their October 2009 meeting and agreed to intensify their efforts to complete the major joint projects determined in the MoU. As a further confirmation of that commitment, the boards issued a joint statement describing their plans and milestone targets for accomplishing the aims of completing main MoU projects by mid-2011, and their commitment to providing the public with a periodic reports explaining their progress (FASB, www.fasb.org).

The converged accounting standards -when adopted- will influence different kinds of entities in different ways. For U.S publicly held corporations, the future of financial reporting will certainly be different from the past and present. However, U.S publicly held companies will not be required to adopt current International Financial Reporting Standards (IFRS) since U.S GAAP will be subjected to standard-level convergence instead of set-level convergence. That is, U.S. GAAP and IFRS are converging at the standard level. As a result of the standard-level convergence, both U.S GAAP and IFRS will change significantly as they evolve into a unified set of international standards that will contain some standards from current U.S. GAAP, some standards from current IFRS, and many standards that will be different from those found in existing standards of both FASB and IFRS. In contrast, The countries that have already adopted IFRS (100-plus) have been subjected to a set-level convergence. The set-level convergence takes place when entities in a country adopt an entire existing set of accounting standards that are adopted in other countries. In other words, those countries have replaced their

national sets of accounting standards with current IFRS which is differnt from the case of U.S GAAP. (Pounder, 2008a)

4. Current Development on IASB-FASB Convergence Process

The IASB and FASB have been working on a number of notable projects to accomplish convergence of IFRSs and US GAAP since 2002. The major goals of the two boards are to improve the existing sets of accounting standards through the issuance of high quality worldwide accounting standards and bringing greater convergence between IFRS and US GAAP. This section introduces current development regarding significant topics that were deemed critical to the IFRS and US GAAP convergence process. Therefore, this section includes discussion of FASB and IASB joint conceptual framework project, the IASB -FASB financial statement presentation joint project, the converged standard on fair value and lease accounting joint project.

4.1. FASB and IASB Joint Conceptual Framework Project

The conceptual framework can be defined as "a coherent system of interrelated objectives and fundamentals that prescribes the nature, function, and limitations of financial reporting" (Johnson, 2004). The first attempt to develop a conceptual framework for accounting is by FASB in the the early 1970s while the first pronouncements started in 1987. Beginning from 1987 until 2010, the FASB's conceptual framework project has resulted in the issuance of eight 'Statement of Financial Accounting Concepts'. The FASB's concept statements established a constitution used by the board and formed a basis to set accounting standards. However, the FASB's conceptual framework has been subjected to criticism to be failure. Solomons (1986) pointed out that the FASB's conceptual framework requires a radical change despite the benefits gained by it. Solomons stated that definitions included in the conceptual framework are vague and unduly used in an unduly way. Solomons also indicated that the board is deferring issuance of statements regarding crucial decisions such as measuring income. Moreover, Johnson (2004) pointed out that the conceptual framework has not kept up with changing times and changing business practices because most of the conceptual framework's statements were issued 20 or more years ago (Johnson, 2004a).

In 1989, the International Accounting Standards Committee (IASC) issued its conceptual framework entitled 'Framework for the Preparation and Presentation of Financial Statement'. The IASC pointed out that the the conceptual framework aims at setting out the concepts that underlie the preparation and presentation of financial statements for external users (IASB, conceptual framework). Although there are many similarities between the FASB and IASB conceptual frameworks, the two frameworks have always been distinguishable and separate from each

others. The two conceptual frameworks are different on some concepts. The IASB's framework is intended to assist not only standard setters but also preparers of financial statement such as auditors in providing opinions about the fairness of the financial statements and users in interpreting information included in the financial statement. In contrast, the concepts statements contained in the FASB's conceptual frameworks indicated that they do not justify changing in generally accepted accounting and reporting practices or interpreting existing accounting standards based on personal interpretations of the concepts. (Johnson, 2004b). In addition, Camphell et al. (2002) stated that there are several differences between the two frameworks in in general organization, level of details as contained in the concepts statements in addition to other topical differences.

On October 2004, the FASB and the IASB agreed to add to their agenda a new joint project in order to revise their conceptual frameworks for financial accounting and reporting. The purpose of this joint project is to update, improve and converge the existing frameworks of the two boards into a single framework that can be used as a basis in developing new high quality accounting standards or revising the existing ones. The joint conceptual framework project is composed of eight phases which are designated from A to H as follows:

- A. Objectives and qualitative characteristics;
- B. Definitions of elements, recognition and derecognition;
- C. Measurement:
- D. Reporting entity concept;
- E. Boundaries of financial reporting, and Presentation and Disclosure;
- F. Purpose and status of the framework;
- G. Application of the framework to not-for-profit entities;
- H. Remaining Issues, if any (IASB, www.iasb.org).

As a part of this joint Project, the FASB and the IASB issued a discussion paper titled 'Preliminary Views on an Improved Conceptual Framework for Financial Reporting: The Objective of Financial Reporting and Qualitative Characteristics of Decision-useful Financial Reporting Information' for phase A In July 2006. In May 2008 the two boards issued an exposure draft entitled 'An Improved Conceptual Framework for Financial Reporting'. The exposure draft was composed of two chapters; the first one presented the objective of financial reporting while second chapter addresses the qualitative characteristics and constraints of decision-useful financial reporting information. (IASB-FASB, Exposure Draft, 2008). The IASB and the FASB issued the final versions of those two chapters later in September 2010. Phases B, C and D of the project are currently still under progress.

The FASB and IASB indicated that a common aim of two boards is to develope sets of accounting standards based on principles. The conceptual framework joint project is currently being conducted in parallel to several significant joint projects to converge the boards accounting standards. In spite that the conceptual framework project was launched in 2004, the two boards have just finished the first phase of it (phase A) in september 2010. The boards were criticised by many to be going slowly for accomplishing such a significant project which is regarded as a fundamental concepts of financial reporting. Colleen Cunningham the member of FASB's Financial Accounting Standards Advisory Committee (FASAC) and IFRS Standards Advisory Committee stated that;

"I still believe that this project should be a priority; particularly as the big ticket convergence projects are tackled, wouldn't it be easier to agree on standards if the conceptual frameworks were the same for both boards? If anything, I think that the financial crisis brought a sharper focus on some of the fundamental issues and limitations of financial reporting that need to be addressed before more complex standards are issued" (Cunningham, 2010)

4.2. The IASB -FASB Financial Statement Presentation Joint Project

A joint project on financial statement presentation was launched by the IASB and the FASB in April 2004. The goal of this project is to develope a standard that will guide the organization and presentation of accounting information in the financial statements. The boards issued their joint discussion paper entitled "Preliminary View on Financial Statement Presentation" in October 2008 as a part of their efforts to conduct the project. The new proposal is regarded as a radical change to the way in which financial information is presented in the balance sheet and, to some extent, in the statement of comprehensive income. This suggested presentation method requires an entity to present information about the way it creates value (its business activities) separately from information about the way it finances those business activities (its financing activities) (FASB, Discussion Paper, 2008). According to this proposal, each financial statement consisted of the following four major sections:

- **A.** Business: in this section an entity presents information about its business activities. This section will be divided into operating and investing subsections,
- **B.** Financing: in this section an entity presents information about the financing of its business activities separately depending on the source of that financing or funds. More specifically, information about sources of finance provided by non owner with its related changes should be presented separately from financial resources contributed by owners together with its related changes,
- C. Discontinued operations,
- **D.** Income taxes: in the statement of comprehensive income, an entity presents separately information about its income tax expense (benefit) which is related to the following:

- 1. Income from continuing operations (the total of its income or loss from business and financing activities)
- 2. Discontinued operations
- **3.** Other comprehensive income items.

The proposed classification model for the four financial statement is illustrated as follows in table 1:

Table 1. The proposed classification scheme for the financial statements

Statement of Financial	Statement of	Statement of Cash
Position	Comprehensive Income	Flows
Business	Business	Business
 Operating assets and 	 Operating income and 	 Operating cash
liabilities	expenses	flows
 Investing assets and 	 Investment income and 	 Investing cash
liabilities	expenses	flows
Financing	Financing	Financing
 Financing assets 	 Financing asset income 	 Financing asset
 Financing liabilities 	 Financing liability 	cash flows
	expenses	 Financing liability
		cash flows
Income taxes	Income taxes on continuing	Income taxes
	operations (business and	
	financing)	
Discontinued	Discontinued operations,	Discontinued
operations	net of tax	operations
	Other comprehensive	
	income,	
	net of tax	
Equity		Equity

Source: Financial Accounting Standards Board, (2008). Discussion Paper, Preliminary Views on Financial Statement Presentation, Retrieved from: http://www.fasb.org/DP Financial Statement Presentation.pdf, 08. 27. 2011

As indicated in the joint discussion paper of IASB and FASB, the proposed model has adopted the followings core financial statement presentation principles:

1. Cohesiveness: this principle states that an entity has to present accounting information in its financial statements in a way that reflects a cohesive financial picture of its activities. That is, each financial statement should contain the same sections and categories. In this manner, clear relationship between the statements will be portrayed. In addition, the financial statement will be viewed as complementing each others. This way of presentation also facilitate analysis of financial statements.

- **2.** Disaggregation principle which dictates that an entity should disaggregate information in its financial statements in a way that makes it useful in the evaluation of the amount, timing, and uncertainty of its future cash flows. To achieve this purpose, categories with essentially similar economic characteristics will be grouped and presenting categories that do not have similar economic characteristics as distinct line items.
- **3.** Liquidity and financial flexibility principle which means that an entity should present information in its financial statements in a manner that helps users to evaluate the entity's ability to meet its financial obligations as they mature and to decide with or not to invest in different business opportunities.

The proposed classification and format of the financial statement is as follows:

- Statement of Financial Position: the statement of financial position is the most influenced statement by proposed financial statements presentation model. As can be seen from table 1 above, the statement of financial position is presented by major activities which are operating, investing and financing rather than by assets, liabilities and equity as in the existing presentation model. In each section, an entity would present both assets and liabilities with net asset subtotals being shown for each item. Additionally, an entity may choose to present totals for assets and liabilities and subtotals for short-term and long-term assets and liabilities.
- The Statement of Comprehensive Income: an entity should present comprehensive income and its components in a separate statement of comprehensive income. This statement separates business activities from financing ones. In addition, operating snd investing activities are presented as subtitles under business activities. Discontinued operations are disclosed in a separate category, but extraordinary activities would no longer be presented. Thus, the statement of comprehensive income comprises two main parts; net profit or loss and other comprehensive income. Comprehensive income will be disclosed as bottom line of the statement. The comprehensive income and other comprehensive income items would be no longer disclosed in a statement of changes in stockholder's equity. This new presentation way is different from the existing presentation requirement under both IFRSs and U.S. GAAP. The existing presentation model allows several alternative formats for presenting comprehensive income and its components. The IASB and FASB pointed out that presenting a single statement of comprehensive income will improve the comparability of financial statements among companies as all entities will present the comprehensive income and its components in a similar way in the same financial statement.
- Statement of Cash Flows: the proposed statement of cash flows will have the same sections and categories as the statement of financial position and the statement of comprehensive income. However, the new proposal suggests a minor change to the presentation of this statement's categories. According to the

suggested model cash flows resulted from operating and investing activities are grouped under the business section whereas these two items are presented in separate sections under the existing practice. In addition, the two boards require the use of direct method to present information about cash flows from operating because under this method the statement of cash flows will be more understandable by users of financial statement. Moreover, the boards indicated that the direct method provides insight into entity's cash flows. The existing practice for reporting of cash flows from operations under IFRS and U.S. GAAP permits either the direct or indirect method.

• The Statement of Changes in Equity: this statements will not be changed under the proposed model and will continue to be required as part of the set of financial statements.

The IASB and FASB boards indicated that the major purpose of this joint project is to improve the usefulness of the information presented in an entity's financial statements so as to help financial statements users make relevant decisions in their capacity as providers of financial resources. Moreover, the proposed changes as suggested by the new model will contribute in removing differences between the presentation formats used by companies that reporting under IFRSs and those reporting according to U.S. GAAP. However, some argued that this new presentation model will be accompanied by impacts on the financial statements users. For example, Henry. Et el, (2008), have argued "whether changes to the format of the financial statements will help users to better understand an entity's financial position and to better assess the entity's future cash flows and whether the benefits of change will outweigh the costs". They also pointed out that more sophisticated financial statement users would likely gain temporary advantage over less sophisticated users since they can understand and analyze the new format of the financial statements more quickly than others. In addition to that, the American Accounting Association's (AAA) Financial Accounting Standards Committee (FASC) have discussed several potential problems related to this proposed project. Many of the problems discussed by the AAA are related to potential learning impediments for the financial statements users to adapt to the new model of financial statements presentation. Among these problems discussed by the AAA is the improper timing of the proposal. The AAA pointed out that this proposal seems to contain an implicit conceptual framework whereas a joint and comprehensive conceptual framework is being under progress by the FASB and IASB (AAA FASC, 2010).

The new proposed presentation of the financial statements contains new format and contents which seems to be 'financial statement unlike any you've seen' as stated by Bruce Pounder, president of accounting education firm Leveraged Logic. Pounder stated that

"... to the extent that the boards can convince their constituents of the benefits of changing the contents and formats of the financial statements, we may soon find ourselves entering a new era of financial reporting under truly global standards" (Pounder, 2008b).

4.3. The Converged Standard on Fair Value: Would it Quell Debate?

Fair value is regarded as a compex and a controversial issue in accounting and accordingly has resulted in substantial research efforts. The fair value concept of accounting may be regarded new by the majority of the financial statements users. However, the principle of fair value has existed since the 1930s that was referred to as mark to market accounting and has became a significant part of financial accounting In addition to that, fair value accounting (FVA) was not developed or enforced by FASB or IASB (or its predecessor IASC) or any other standard setting bodied (Cascini and DelFavero, 2011, p. 1). In the international arena, fair value was introduced into accounting standards in 1975 (IAS 2 -1975). This was an introduction for integrating the fair value concept as an altenative reporting model to historical cost. Subsequently, the use of fair value in international accounting standards was introduced and expanded into Property, Plant, and Equipment (IAS 16); Leases (IAS 17); Revenues (IAS 18); Employee Benefits (IAS 19); Accounting and Reporting by Retirement Benefit Plans (IAS 26); Impairment of Assets (IAS 36); Financial Instruments; Recognition and Measurement (IAS 39); Investment Property (IAS 40) (Shanklin et al., 2011, p. 24).

The fair value concept was introduced by FASB into accounting standards in 1993. At that time, the U.S GAAP standards required that all debt and equity investments classified as trading securities or available-for-sale securities must be recognized and reported in the financial statements at their fair values. Further pronouncements have been issued subsequently in order to provide guidance on recognizing, measuring, and reporting of other issues such as financial instruments, hedges, and other assets and liabilities at fair value (Cascini and DelFavero, 2011). However, the US. GAAP accounting standards that are mainly regarded to be the fair value standards today are SFAS 157 "Fair Value Measurements" and SFAS 159 "The Fair Value Option for Financial Assets and Financial Liabilities". SFAS 157 defines fair value as the exit price or "the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date". SFAS 157 identified three different categories of valuation criteria for assets and liabilities breaks them them down into three levels as below:

1. Level one: unadjusted quoted prices in active market for identical assets and liabilities,

- 2. Level two: observable inputs other than quoted prices for the asset or liability that include quoted prices for similar assets or liabilities in active markets or quoted prices for similar assets or liabilities in markets that are not active,
- **3.** Level three: Unobservable input based on the reporting entity's assessment of market participant assumptions, based on the information available in the circumstances.

In spite of this extensive efforts, IASB and FASB fair value standards have been criticised and described to have many shortcomings. As stated earlier, the IASC introduces the fair value as a measurement base in 1975 through IAS 2 and followed by fair value requirements by other standards. However, IASB have not specify any guidance or methodology to be regarded as a appropriate basis for determining fair value. Moreover, the IASB did not specify any authoritative definition for fair value until September 2009 in an exposure titled Fair Value Measurement (Shanklin et al., 2011, p. 24). In addition, the SFAS 157 treatment of the fair value accounting was also criticised by many. For example, Benston (2011) have summarised the following shortcomings of SFAS 157:

- **1.** Many of the illustrative examples for determining fair value involve calculations of value in use or entrance values even though the FASB has defined fair value as the exit price;
- **2.** Fair values for inventories, other than finished goods, and fixed assets that may be included in business combinations form problems which are not recognized;
- **3.** The determination of fair values other than level 1 difficult to verify and could be manipulated;
- **4.** The determination and verification of fair values which are not based on actual market prices are costly;
- **5.** Although transaction costs must not be used as stated in SFAC 157, they often are not excluded.

Additionally, several differences exist between IFRS and U.S. GAAP standards of fair value accounting in regard to the followings:

- Fair value definition;
- Methods for measuring fair value;
- The specific balance sheet items that are required or allowed to be measured at fair value;
- The disclosures that a entity must make in respect to its measurements of fair values (Pounder, 2011).

As a result to that, the FASB and the IASB agreed to develop common fair value measurement guidance on their meetings in October 2009. The objective of this joint project was to to develop common guidance that is used as basis for fair value measurement for IFRSs and U.S. GAAP. The two boards pointed out that having

common requirements for fair value measurement and disclosure would improve the comparability of financial statements prepared under IFRSs and U.S. GAAP. Additionally, this may participate in reducing discrepancy in the application of fair value measurement requirements and simplifying financial reporting (FASB, Ed, 2011 p.169). As a result of this joint project, the IASB and the FASB issued separate pronouncements that represent the changes to IFRS and U.S. GAAP fair value accounting. The IASB issued IFRS 13 'Fair Value Measurement' and the FASB issued Accounting Standards Update (ASU) No. 2011-04 titled "Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs".

In its new standard (IFRS 13) makes more substantial changes to fair value accounting. The IFRS 13 introduce new definition of fair value which is identical to the existing definition of fair value under U.S. GAAP in SFAC 157. The IASB indicated that fair values should be exit prices and defines it as "the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date" (Pounder, 2011). Furthermore, the the IASB includes a the same three-level hierarchy described in SFAS No:157 for the purpose of fair value measurement (Ernst & Young, 2011)

FASB's Accounting Standards Update (ASU) contains some clarifications for how to apply existing fair value measurement in addition to some additional disclosure requirements. For example, the FASB's ASA indicated that the concepts of "highest and best use¹ " and "valuation premise²" in a fair value measurement must only be employed when measuring the fair value of nonfinancial assets. In addition, according to the new FASB's ASU the reporting entity is required for the discloser of quantitative information about the unobservable inputs when measuring fair value at level 3 on the fair value hierarchy (FASB, Ed, 2011).

The new converged fair value standards is the culmination of more than five years extensive efforts made by IASB and FASB in order to harmonize and improve fair value measurement and its disclosure requirements. This new standard is considered as an important step towards converging accounting standards for fair value measurement. However, if we look to this converged standards on the whole

¹ The use of a nonfinancial asset by market participants that would maximize the value of the asset or the group of assets and liabilities (for example, a business) within which the asset would be used.

² The highest and best use of a nonfinancial asset establishes the valuation premise used to measure the fair value of the asset. When determining the highest and best use for non-financial assets, such as property interests, it is important to determine whether the highest and best use of that property interest is within a group, or on a stand-alone basis. The fair value of an asset that has a highest and best use in combination with other assets is determined on the basis of the use of the asset together with those other complementary assets, even if the asset is aggregated or disaggregated at a different level. In contrast, the fair value of a property interest that provides maximum value on a stand-alone basis is measured based on the price that would be received to sell that property interest on a stand-alone basis

we can notice that they are are more closer to previous FASB's standard than they are to previous IASB's one. The new FASB's ASU supersedes much of the requirements in the existing FASB standards. The new ASU is said to be just a clarification of existing fair value accounting and include wording modifications for the purpose of harmonizing it with IFRS 13. In other word, the new FASB's standards do not seem to have substantial modifications for the measurement of fair values that would end or resolve controversial issues in the existing ones. As stated earlier, many argued that fair values other than level one are likely to be manipulated by overoptimistic managers and difficult to be verified by auditors. (Benston 2011 and Benston 2006). For example, Benston, 2006 pointed out that Enron extensively used level three estimates and in some situations level two estimates fair value hierarchies for energy contracts and was able to manipulate revenue and net income and thus overstated its assets to a wide range. Inspite of that, the new converged standards on fair value do not include any changes in respect to the three different levels of valuation criteria for assets and liabilities.

4.4. Rewriting Lease Accounting

Leasing is regarded as an important source of finance. Recently, leases has become a common method of acquiring long term assets so as to be used by different entities. The World Leasing Yearbook stated that that leasing activities in 2008 are estimated to be US \$640 billion in 2010. (IASB Snapshot, 2010). Companies use leasing as a mean of financing its acquisition of property planta and equipments because it has the following advantages:

- 1. It offers 100 percent financing;
- 2. It offers protection against obsolescence;
- **3.** It is frequently less costly than other forms of financing the cost of the acquisition of fixed assets;
- **4.** If the lessee qualified as an operating lease, it does not add debt to the balance sheet (Schroeder et al. 2009, p. 444).

It is important that lease accounting should provide financial statements users with a complete and understandable picture of the firms' leasing activities. In SFAS 13 "Accounting for Leases" and IAS No. 17 "Leases", both US GAAP and IASB identified specific criteria for classifying leases as either finance leases (the term capital leases is used in U.S GAAP) or operating leases. According to the two set of standards, payments of leases deemed to be operating are treated as expenses and reported in the income statement and, thus, they will not result in asset or liability reflected in the balance sheet. On the other hand, if the lease is classified as a finance one, it will be treated like the acquisition of an asset, giving rise to an asset and a liability that will be reported in the balance sheet. However, both U.S

GAAP and IFRS existing lease standards have subjected to criticisms by many. Among these criticisms are the followings:

- There are different accounting models for the treatment of leases (finance and operating);
- Existing guidance effectively allows the structuring of lease agreements to accomplish certain accounting treatment;
- Operating lease accounting fails to recognize a contractual liability and the related acquisition of assets;
- Operating lease disclosures do not provide financial statement users with adequate information enabling them to determine the amount of related assets and liabilities (Kuczborski, 2010).

The significant criticism among the others is that lessees do not recognise all lease obligations on their balance sheets. The current distinction between a finance leases and the operating lease is considered to be arbitrary so that it enables many entities to structure lease contracts in ways that produce the desired financial reporting pictures and gained benefits from this capital structure. For example, FASB and IASB have estimated annual leasing volume in 2007 at \$760 billion. However, many of those lease transactions are structured to be classified as operating leses and thus are not reflected on balance sheets (Whitehouse, 200).

A a consequent to that, the FASB and the IASB decide to add a lease accounting as a joint project to their agenda in July 2006. The primary objective of the project is to develop a new lease accounting model in order to improve the transparency of leasing transactions as reported in financial statements. The Boards concluded that the existing lease accounting standards for both IASB and FASB fail to meet the needs financial statements users because they do not provide a transparent reporting of leasing transactions in the financial statements.

The FASB and IASB issued a discussion paper in March 2009 that introduces the Boards' preliminary views of a new model for leasing accounting. In Augest 2010 the boards issued Exposure Draft (ED) addressing their proposed new model of lease accounting. The new leases model indicates that assets and liabilities arising under leases transactions should be recognized in the statement of financial position. Under the proposed model, employed the "right-of-use" model for leases accounting. The right-of-us model states that an asset representing the right to use the leased property over the lease term should be recognized. In addition, the future rent payments expected to be made over the life of the lease represents a liability obligation to pay rentals that must be recognized (FASB, Ed, 2011).

Thus, the major point of the Boards' proposal is to remove the distinction between the finance and operating lease and consequently removing the off-balance sheet treatments for operating leases. The IASB and FASB pointed out that no matter of the many special provisions and variations in lease arrangements, the most significant is the focus on economic substance of the leases transactions. Specifically, they have concluded that a lessee's right to use leased asset meets the definition of an asset, like other rights that are commonly recognized as assets such as patents and franchises. In the same manner, the boards have also indicated that a lessee's obligation to make rental payments to the lessor made over the life of the lease meets the definition of a liability. (Pounder, 2009)

The Boards' proposed model will have impacts on company's financial statement. The lessees that currently classify leases as operating leases would certainly recognize more assets and liabilities on their balance sheets than is the under either U.S. GAAP or IFRS existing standards (Pounder, 2009). Therefore, the new leases model will result in material influences on financial statements metrics of the firms. For example, as debt will go up, the debt-to-equity ratio will increase, but equity is going to remain unchanged. That leads to immediate concerns about the amount of leverage companies will suddenly see arising into their balance sheets. Furthermore, according to the proposed model, there will no longer be rent expense for long-term leases. Instead, the "right-of-use" leased asset will be reported in the form of interest expense and amortization. This accounting model will result in improved earnings before interest, taxes, depreciation and amortization (EBITDA) for entities because rent expense is deducted in arriving at EBITDA while interest and depreciation are not (Hardy, 2010, p. 20). At the same time, the lessee's net income is likely to decrease to the extent that interest, depreciation, and executory cost expenses in total exceed the present rent expense. This reduction in net income accompanied by an increase in leased assets on lessees' balance sheets may leas to the reduction to return on assets (ROA) calculated by lessees. The effects of such a change in lease accounting would be significant for both managers and external auditors in terms of the need for substantial transition efforts. Thus, questions have been raised about the complication of the reporting process the financial statements disclosure requirements after the application of the new leases model and and whether the new lease model will result in substantive benefits the justify the significant increases in accounting costs. (Pounder, 2009)

5. Conclusion

IFRSs have been adopted or adapted by more than one hundred countries. The convergence of U.S GAAP and IFRS seems to be inevitable. Proponents of this convergence process highlight the potential to improve comparability of financial statements for companies from different countries. They argue that the use of a single set of high quality International Accounting Standards will facilitate the movement of investments across countries and will help companies and capital markets compete all over the world. However, others argue that the shift to IFRS will be accompanied with additional costs related to educating market participants

regarding differences in accounting standards, and companies' preparation of employees and computer systems for this transition (Erickson et al. 2009, p 537). The Converged standards -when adopted- will contain some standards from current U.S. GAAP, some standards from current IFRS, and many standards that will be different from those found in either today as the (GAAP) and IFRS are converging at the standard level. The next few years are expected to result in extensive modifications of the reporting environments both in the U.S. and worldwide and we will likely find ourselves entering a new era of financial reporting.

6. References

American Accounting Association's Financial Accounting Standards Committee (2010). Response to the Financial Accounting Standards Board's and the International Accounting Standard Board's Joint Discussion Paper Entitled Preliminary Views on Financial Statement Presentation. *Accounting Horizons*, Vol. 24, No. 1, pp. 149–158.

Alexander, D, Jermakwicz, E. (2006). A True and Fair View of the Principles/Rules Debate. *ABACUS*, Vol. 42., No. 2., pp. 132-164.

Benston, G.J. (2006). Fair-value accounting: A cautionary tale from Enron. *Journal of Accounting and Public Policy* 25, 465.

Cascini, K. T., DelFavero A. (2011). An Evaluation Of The Implementation of Fair Value Accounting: Impact On Financial Reporting. *Journal of Business & Economics Research*, January, Vol. 9, No.1, pp. 1-16 484.

Benston, G.J. (2008). The shortcomings of fair-value accounting described in SFAS 157. *Journal of Accounting and Public Policy*, Vol. 2, 101–114.

Chen, L. H., & Sami, H. (2008). Trading volume reaction to the earnings reconciliation from IAS to U.S. GAAP. *Contemporary Accounting Research*, 25(1), 15-53.

Capbell, J.E, Hermanson, H.M, McAlister. J. P. (2002). Obstacles to International Accounting Standards Convergence. *The CPA Journal*, May, pp. 21-24.

Carmona S, Trombetta M. (2010). The IASB and FASB convergence process and the need for 'concept-based' accounting teaching. Advances in Accounting, incorporating Advances in International Accounting, Vol. 26, pp. 1–5.

Cascini, K. T., DelFavero A. (2011). An Evaluation Of The Implementation Of Fair Value Accounting: Impact On Financial Reporting. *Journal of Business & Economics Research*, Vol. 9, No. 1, pp. 1-16.

Clay, M. E. (2007). IASB and FASB Working Together to Converge Accounting Standards. *Northeast Business & Economics Association*, pp. 268-272.

Cunningham, C. (2010). Accounting Rules Framework: Get It Together. *Compliance Week*, December, pp. 34-35.

Dennis, I., (2008). A conceptual enquiry into the concept of a 'principles-based' accounting Standard. *The British Accounting Review*, Vol. 40, pp. 260-271.

Ernst & Young (2011). IFRS 13 Fair value measurement, 21st century real estate values Implications for the real estate and construction industries. Web page. Retrieved from

http://www.ey.com/Publication/vwLUAssets/IFRS_13_real_estate_Fair_value_measurement/\$FILE/IFRS_13_RE_Fair_value_measurement.pdf 25.7.2011.

Epstein, B J., Jermakowicz, E. K. (2010). *Interpretation and Application of International Financial Reporting Standards*. 10th edition, John Wiley & Sons, INC.

Erickson D, Esplin A, A. Maines L. (2009). *One world — One accounting, Business Horizons*, Vol. 52., pp. 531-537.

Financial Accounting Standards Board (FASB). (2009). Discussion Paper, Leases: Preliminary Views. Norwalk, CT: FASB.

Financial Accounting Standards Board (FASB). (2010). Exposure Draft, Leases (Topic 840). Norwalk, CT: FASB.

Financial Accounting Standards Board (FASB) Exposure Draft of an improved Conceptual Framework for Financial Reporting: Chapter 1: The Objective of Financial Reporting. Chapter 2: Qualitative Characteristics and Constraints of Decision-useful Financial Reporting Information, May 2008.

Financial Accounting Standards Board (FASB) (2004). FASB Response to SEC Study on the Adoption of a Principles-Based Accounting System, July, Retrieved from http://www.fasb.org/response_sec_study_iuly2004.pdf, 08.05.2011.

Financial Accounting Standards Board (2008). Discussion Paper, Preliminary Views on Financial Statement Presentation. Web page. Retrieved from

http://www.fasb.org/DP_Financial_Statement_Presentation.pdf, 08.27.2011.

Financial Accounting Standards Board (2006). Statement of Financial Accounting Standard 157: fair value measurements. Web page. Retrieved from

http://www.fasb.org/cs/BlobServer?blobcol=urldata&blobtable=MungoBlobs&blobkey=id&blobwhere=1175823288587&blobheader=application%2Fpdf 1.5.2011.

Hardy, B. (2010). Making Sense of the New Lease-Accounting Rules. *Retail Preperty Insights*, Vol. 17, No, 3, pp. 19-24.

Hellmann, A., Perera H., Patel C. (2010). Contextual issues of the convergence of International Financial Reporting Standards: The case of Germany. Advances in Accounting, incorporating *Advances in International Accounting*, Vol. 26, pp. 108–116.

Henry E, J. Holzmann O, (2008). Financial Statement Presentation. *The Journal of Corporate Accounting & Finance*, November/December, pp. 79-83.

Henry, E., Lin, S., Yang, Y. (2009). The European-U.S. GAAP gap: amount, type, homogeneity and value relevance of IFRS to U.S. GAAP from 20-F reconciliations. *Accounting Horizons* 23, 121–150.

International Accounting Standards Board, Snapshot: Leases, (2010). Web page. Retrieved from: http://www.ey.com/Publication/vwLUAssets/IFRS_Practical_matters_lease_accounting__GL_IFRS/\$ File/IFRS Practical matters lease accounting%20 GL IFRS.pdf 08. 18. 2011.

International Accounting Standards Board (IASB), Discussion Paper, Preliminary Views on an improved Conceptual Framework for Financial Reporting; The Objective of Financial Reporting and Qualitative Characteristics of Decision-useful Financial Reporting Information, November 2006.

International Accounting Standards Board (IASB), International Accounting Standard 16 (IAS 16): Property, Plant and Equipment.

International Accounting Standards Board (IASB), The Conceptual Framework for Financial Reporting.

Johnson, L.T. (2004). The Project to Revisit the Conceptual Framework, Article from The FASB Report. Web page. Retrieved from

http://www.fasb.org/jsp/FASB/Page/project_revisit_cf_tfr_dec2004.pdf, 08.12.2011

Johnson, L.T. (2004). Understanding the Conceptual Framework, Article from The FASB Report, Web page. Retrieved from

http://www.fasb.org/articles&reports/conceptual_framework_tfr_dec2004.pdf, 08. 12.2011

Kuczborski, M.D. (2010). Major Lease Accounting Changes on the Way. *Pennsylvania CPA Journal*, Winter.

Leuz, C. (2003). IAS versus U.S. GAAP: Information-asymmetry based evidence from Germany's new market. *Journal of Accounting Research*, 41(3), 445–472.

Pounder, B. (2008). Myths and Facts about Convergence. Strategic Finance. September, pp. 59-60.

Pounder, B. (2008). Financial Statements Unlike Any You've Seen (Part 1). *Strategic Finance*, November, pp. 19-20.

Pounder, B. (2009). New View of Lease Accounting. Strategic Finance. May, pp. 17-19.

Pounder, B. (2011). A World of Fair Value. Strategic Finance. August, pp. 15-16.

Schipper, K. (2003). Principles-Based Accounting Standards. *Accounting Horizons*, Vol. 17, No. 1, pp. 61–72.

Schroeder, R. G.; Clark, M. W.; Cathey, J. M. (2009). Financial Accounting Theoy and Analysis: Text and Cases, 9th edition, John Wiley & Sons, INC.

Securities and Exchange Commission (SEC), (2008, November 14). Roadmap for the Potential Use of Financial Statements Prepared in Accordance with International Financial Reporting Standards by U.S. Issuers. Web page. Retrieved from http://www.sec.gov/rules/proposed/2008/33-8982.pdf on september 8, 201.

Shanklin, S. B; Hunter, D. R. & Ehlen C. R. (2011). A Retrospective View of the IFRS' Conceptual Path And Treatment Of Fair Value Measurements In Financial Reporting. *Journal of Business & Eeonomies Research*, March, Vol. 9, pp. 23-28.

Shortridge, R. T. & M. Myring. (2004). Defining principles-based accounting standards. *The CPA Journal*. Web page. Rerrieved fromt: www.nysscpa.org/cpajournal/2004/804/essentials/p34.htm. 01.07.2011.

Solomons, D. (1986). The Fasb's Conceptual Framework: an Evaluation: The hoard's dilem-ma: radicnl change or fine-tuning. *Journal of Accountancy*, June, pp. 114-124.

Whitehouse, T. (2009). Accounting Industry Brief. Accounting & Auditing, May, pp. 35-36.

Opportunities and Challenges

in the Implementation of Quality Assurance for Auditing in Kosovo

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Abstract: This study examines the international requirements of audit quality assurance and focuses on the challenges faced by the newest economy in the region, Kosovo, in implementation of same. This study focuses on the monitoring of compliance by business organizations in Kosovo with the International Financial Reporting Standards and Kosovo Accounting Standards as appropriate, and the impact that this compliance or non compliance has in the economy. In addition this study examines compliance with International Standards of Auditing by auditors and reviews the quality of the audit process in the broader context of the requirements for audit quality assurance. It is found that there are weaknesses in almost all elements of Kosovo's corporate financial reporting and auditing regime, which is not dissimilar, linked to larger challenges faced by all former Yugoslav economies in transitioning to the new market economic system. The economies of former Yugoslavia face similar challenges in integration with the European Union's economic and financial system, because of the unique shared characteristics of the former Yugoslav system. In parallel with the economic transitional reforms undertaken within the region, the global financial reporting and auditing system has been changed, with a convergence to International financial reporting standards, international standards of auditing and a new emphasis on audit quality assurance and external oversight mechanisms to sustain it. Though Kosovo is not alone within the region in addressing the reforms required to integrate the economy fully into the EU system, the study reveals both opportunities and challenges unique to Kosovo and makes recommendations for reform.

Keywords: quality assurance; audit report; financial statements; quality control; IFRS; ISA

JEL Classification: M41; M42; M49

1. Introduction

In the wake of the international financial crisis, special weight is given to strengthening of financial reporting regime, especially to the oversight of audit profession in order to prevent similar crises, mitigation, and resolution. These activities try to overcome weaknesses in the international financial systems that

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potentially contribute to the propensity for and magnitude of global financial instability, hence requiring collective action at the international level. For emerging markets there is widespread recognition that in order for them to attract investments and increase economic growth, these countries have to invest in their national systems and, hence, requires enhanced measures at the country level. In a world of integrated capital markets, these countries will have to learn to speak through recognized international financial language. This provides a basic "public goods" rationale for minimum standards, which benefit international and individual national systems.

One of the most significant elements from the research is the lack of understanding of the nature and application of global standards. This is something that has been experienced in Kosovo's evolution to the western European market system.

This research study focus on the monitoring of compliance by business organizations in Kosovo with the International Financial Reporting Standards and Kosovo Accounting Standards as appropriate, and the impact that this compliance or non compliance has in the economy. In addition this study examines compliance with International Standards of Auditing by auditors and reviews the quality of the audit process in the broader context of the requirements for audit quality assurance.

The research it also takes into consideration the strengths and weaknesses of the accounting and auditing environment in Kosovo that influence the quality of corporate financial reporting and involves a review of both mandatory requirements and actual practice. The research uses International Financial Reporting Standards (IFRS) and International Standards on Auditing (ISA) as benchmarks and draws on international experience and good practices in the field of accounting and auditing regulation. The research also has regard to the relevant requirements of EU law, the acquis communautaire.

The nature of commerce has become global during the 20th century, and the demand for financial statements to be prepared on the same basis (using the same standards) has also become global.

During the transition to a market economy, many of the post socialist economies in Europe successfully put in place many important elements of the institutional and statutory framework for financial reporting. However, many of these economies should take further steps in order to achieve its goal of a sound financial reporting framework tailored to the needs of the open economies and aligned with the EU body of law (*acquis communautaire*), international standards and best practices

2. Literature Review

The literature review has highlighted the main weaknesses in the attempts of former socialist economies of Central and South East Europe in implementing reforms designed to stimulate economic development through creation of a business-enabling environment, including the requirements for credible financial statements prepared in accordance with international standards. The importance of developing institutional mechanisms (e.g. enforcement, corporate governance structures, and auditing) to encourage compliance with IFRS has been widely discussed in the literature. There is also a growing realization that while countries can adopt international accounting standards relatively easily, developing the institutional mechanisms to ensure successful implementation and foster compliance is much more complex and time consuming.

In 2006 the World Bank published its Report on the Observance of Standards and Codes (ROSC) in Accounting and Auditing for Kosovo. The study involved a comparison of existing practices and structures in Kosovo with IFAC and IASB requirements in accounting and auditing and the requirements of the relevant sections of the acquis. ROSC reports have also been completed in relation to all of the economies of former Yugoslavia, including Kosovo, BiH, Croatia, Slovenia and Serbia. And in addition, to neighbor state Albania. These reports contain an important source of recent research data each for country concerned.

Consistent themes have emerged in the literature relating to former Socialist European countries in transition to western style market economies. Bailey (1995) for example, found a number of mistaken assumptions on the part of policy makers which explain the reasons why many countries imported, amended and passed laws applying IFRS to all kinds of enterprises;

The emphasis of other studies on accounting and auditing in the CEE region has been to describe how the practices, regulatory mechanisms and the profession have evolved since the beginning of the transition period.

The existing literature shows evidence that professional bodies have assumed, and have been accorded, substantial responsibilities under recently enacted EU compliant laws in many of the former socialist economies of central and Eastern Europe. This proposed study focuses upon the professional bodies in the newest of the transitional post-socialist economies, Kosovo, and seeks to discover insights that may reveal the extent to which they can be relied upon to fulfill their obligations "in the public interest".

3. Quality Assurance – Review of the Relevant Standards on Quality Control for Audits

This part provides detailed overview of reasons why Quality Control for Audits is so important in Kosovo context and in the context of major economies in the region.

We have identified the core set of standards that apply in most European States that relate to financial reporting, auditing, ethics, education, and that cover the majority of enterprises. We note that the standards are evolving all of the time, and a pace sometimes quicker than some of the economies of the region we work and live in. However, the message is clear, for Kosovo to adopt a new financial reporting and audit framework, it should learn the lessons of neighbor economies that have been through similar dilemmas before.

"Quality assurance is the auditing profession's principal means of demonstrating to the public and to regulators that auditors are performing at a level that meets the established auditing standards and ethical rules."

Quality Assurance relates to the system of quality control in place within a firm which is designed to give reasonable assurance that the firm and its personnel comply with professional standards. Professional standards encapsulate ethical requirements, and legal and regulatory requirements.

An important role on development of quality assurance and the accounting and auditing profession has played International Federation of Accountants, which in 2012 has published second edition of the "Guide to Quality Control for Small and Medium Sized Practices". The Guide is intended to explain and illustrate so as to develop a deeper understanding of the requirements necessary to meet the standards on quality control in compliance with ISQC 1. It offers a practical "how-to" approach that practitioners may use when developing their firms' quality control system. Ultimately, it should help SMPs provide high-quality service to their clients and so enable them to better serve the public interest. IFAC have identified three levels of quality control. These are:

- At the engagement level covered by ISA 220;
- At the firm level covered by ISQC-1;
- At the member body level covered by SMO 1.

ISA 220 covers the "specific responsibilities of firm personnel" and in particular the "engagement partner" in relation to the overall quality of the individual audit engagement.

ISQC-1 establishes the basic principles and essential procedures, and provides guidance in relation to a firms system of quality control for audits. As such the

standard can be seen to outline the policies in procedures in relation to quality control that need to be put in place on a "firm wide basis" to support the quality control of audit engagements as per IAS 220.

SMO 1 "establishes the obligations of IFAC member bodies that relate to quality assurance review programs for their members performing certain audit engagements of financial statements" This section of the relevant extracts from the IFAC Statement of Membership Obligations is summarized, with elements extracted that are of particular importance to Kosovo.

Regardless of who is responsible for the quality control system, the partner(s) should be mindful that the firm's commercial considerations do not override management responsibilities for quality; that performance evaluation, compensation, and promotion demonstrate the primacy of quality; and that sufficient resources are allocated to develop, document, and support quality control policies and procedures.

Cuality-Oriented Internal Culture Determine Person(s) Responsible for Quality Control Incorporate Quality Control Attitude and Messages Into all Firm Communications

Leadership Responsibility Pyramid

Source: IFAC 2010, "Guide to Quality Control for Small and Medium Sized Practices

4. Level of Compliance with the Financial Reporting and Auditing Requirements in Kosovo

This part provides an overview of the evolution of the regulatory framework for accounting and auditing in Kosovo.

4.1 Financial Reporting Regime in Kosovo

The regulatory framework for the Statutory Audit in Kosovo is based on the Law No.04/L-014 on Accounting, Financial Reporting and Audit which supersedes the law promulgated in 2001 (UNMIK Regulation 2001/30 on the Establishment of the Kosovo Board for Standards for Financial Reporting and a Regime for Financial Reporting of Business Organizations

The newly adopted Law on Accounting, Financial Reporting and Auditing which was approved by the parliament of Kosovo in 2011 aims to improve the existing framework through strengthening the oversight of the accounting and audit profession and clarifying further the roles and responsibilities of the regulatory institutions. Current law aims to implement the EU *acquis communautaire* in accounting and auditing, and provides a legal basis for the implementation of international standards.

The Law requires the Kosovo Council on Financial Reporting Standards to issue Kosovo Accounting Standards (KAS) that comply with IFRS after taking into consideration the business environment in Kosovo. The Law requires all corporations POEs, and SOEs to prepare their financial statements in conformity with KAS or IFRS. Applying simplified standards for smaller enterprises is a logical approach. However, adoption of a three-tiered financial reporting structure with public interest entities (PIEs) eventually applying IFRS; SMEs applying simplified financial reporting requirements; and micro enterprises continuing to apply tax-based rules would remove the problem of applying KAS or IFRS in relatively small organizations for which they were not designed or intended. Corporations (other than small corporations), POEs, and SOEs are required submit their (audited) financial statements to the business registry and the Ministry of Economy and Finance. However, the financial statements filed with the business registry are not publicly available. This may hinder the decision making abilities of stakeholders and may also inhibit the market incentive for greater compliance with accounting and audit requirements.

According to the ROSC Report the structure is appropriate but is not working effectively. Limited technical and financial resources have resulted, with institutional weaknesses in several areas. Banks and insurance companies are required to prepare financial statements in compliance with IFRS and the accounting requirements set forth by the Central Bank of Kosovo (CBAK). The recognition and measurement principles as well as the disclosure requirements set out by the CBAK differ from "full IFRS." Compliance with BPK requirements takes precedence, which precludes successful implementation of IFRS in the banking and insurance sectors.

The Law requires the KBSFR to issue auditing standards in conformity with ISA after taking into account the business and economic environment in Kosovo. In

2002, the KBSFR published an Administrative Decision in Albanian, which made application of ISA mandatory for licensed auditors carrying out statutory audits. The ISA adopted in 2002 were the 1999 Albanian language under the framework established by Law on Financial Reporting in 2001, the two leading institutions in the area of accounting and auditing are the Kosovo Council on Standards for Financial Reporting (KCSFR) and the Society of Certified Accountants and Auditors in Kosovo (SCAAK).

4.2 Compliance with financial reporting and audit requirements in Kosovo

The aim of this research was to review the quality assurance regarding compliance with International Standards of Auditing by auditors, or compliance with International Financial Reporting Standards or Kosovo Accounting Standards by business organizations operating in Kosovo.

This review was designed to obtain reasonable assurance that:

- The firm has an adequate system of quality control for its practice relating to audit of general purpose financial statements;
- The firm complies with that system;
- The firm and engagement teams have adhered to professional standards, regulatory and legal requirements in performing audits of general purpose financial statements selected for review, and
- The quality of resources of the firm to support its practice and staff training program.

The purpose of this review is to assess the level of understanding of IAS/IFRS and KAS in business organizations of different sizes, and the application of accounting standards in selected business organizations.

The compliance assessment was carried out through examination of the firm's most recent financial statements submitted to the Business Registry Agency (BRA) and/or the competent regulatory authority such as the CBK and the Kosovo Privatization Agency (KPA). The KBSFR may request general purpose financial statements produced by selected non financial sector business organizations for review arising from its authority under Law No.04/L –014 on Accounting, Financial Reporting and Auditing.

The second aspect of the review involved contact with the selected business organizations to enable understanding of the difficulties and constraints faced by the firms in complying with IFRS/KAS including the quality of supporting working papers.

The review included a comparison of the number of registered business organizations per the Business Registration Agency (BRA) database with the number of annual returns for 2007 including annual financial statements as required by the Regulation 2001/6.

The determinants of IFRS disclosure compliance and the impact of auditor choice on IFRS compliance under the assumption of strict erogeneity of auditor choice. I ascertained firm compliance with the disclosure requirements of IFRS through an examination of the annual reports of a sample of firms that claim to comply with IFRS. I measure compliance using both a weighted and unweighted disclosure score. The study focused on these two years because several new IFRS came into effect during this period, including *IAS 1 Revised*, which requires firms that claim full compliance with IFRS to fully comply with all applicable standards.

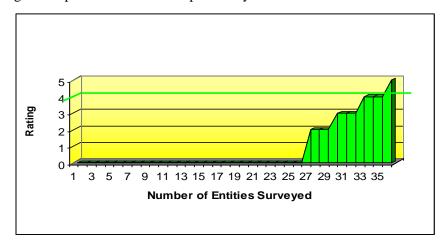
The research focuses on the strengths and weaknesses of the accounting and auditing environment that influence the quality of corporate financial reporting and involves a review of both mandatory requirements and actual practice. It uses International Financial Reporting Standards (IFRS) 1 and International Standards on Auditing (ISA) 2 as benchmarks and draws on international experience and good practices in the field of accounting and auditing regulation. The research also has regard to the relevant requirements of EU law, (the *acquis communautaire*).

A review normally consists of reviewing the quality control system, the working papers and the financial statements of the client that is the subject of IFRS compliance review. As the latter element was undertaken in the other component of the QA project, this audit review was limited to reviewing the QA system and working papers on selected clients. In our study we have presented 5 level of compliance. In these five levels we gave each the necessary issues to which companies have to comply with. These levels are issues are presented below:

The companies should at least try to reach the level 4 which is timely submission of FS with respective agencies.

Level 5	Timely submission of audited IFRS-compliant FS to Business Registry
Level 4	Timely submission of audited KAS-compliant FS to Business Registry
Level 3	Timely submission of audited financial statements to Business Registry Office and Auditor compliant with law
Level 2	Timely submission of financial statements to the Business Registry Office
Level 1	Submission of financial statements to the Business Registry Office

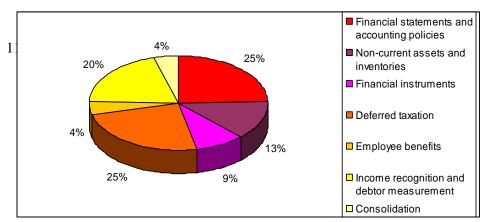
Rating below presents level of compliance by the firms.



- Of the 36 companies 20 responded with financial statements
- 10 of those were audited statements, two of which were by unlicensed auditors
- 10 of the 20 statements had been submitted to the Business Registry
- 9 of the 20 statements had no disclosure notes
- All 19 accounts do not fully comply with requirements of either the KAS or IFRS framework: the deficiencies reflect inadequate understanding of applicable accounting standards by preparers and auditors

Areas of Main Non-Compliance

These are the topic areas where the sample firms failed to comply strictly with the provisions of KAS or IFRS



4.3 Compliance with International Auditing Standards

- As both the reviewed firms are part of their international network, internal quality assurance standards and procedures are expected to be compliant with international QA regulations (i.e. IFAC's SMO1, ISQC1 and ISA220). The research confirmed that the Kosovo firms use the international firm's internal standards and procedures. It is recognized that local audit firms may not be anywhere near the compliance level of the 2 selected firms. International experience indicates that compliance is difficult (however not impossible) for small and sole practitioners. It is important that this environment needs to be taken into account in the design of a QA audit system in Kosovo.
- As international QA regulations are based on a system of self generating improvement by internal detection of substandard work, it is important that audit firms should have a system based on Plan-Do-Check-Act with proper documentation of all incidents and related considerations recorded. Only with such a system that it is possible to rely on the firm's internal QA system. This is one weakness noted in the current procedures of the selected firms.
- It is established that as the responsible partners for Kosovo audit engagements are based abroad (as part of the Balkan or Central Europe regional group) the firms have in place additional QA procedures to fulfill all the ISA and ISQC1 obligations. The firms are managed locally by qualified audit managers; this is possibly due to the small size of the current audit market in Kosovo.
- The review noted certain issues that may warrant consideration by the auditors and the regulatory bodies to enhance the efficiency and effectiveness of the audit process:
- Internal audit departments of the subject clients are not efficiently used to support the work of the external auditor so as to improve the efficiency of the external audit and therefore may help to limit any increase in audit fees

- Some financial institutions conduct annual tender for audit services. This may also be the case for non financial business organizations. This practice may endanger proper audit work and due care as the auditor may focus too much on winning the next tender with a lower audit fee rather than using the knowledge gathered for the benefits of the client.
- Statutory audits are required for the benefits of current investors in the audited business as well as for the protection of the public interest. It is possible that current statutory audit requirements in Kosovo may not have been the subject of careful cost benefit considerations by the regulatory authorities to prevent unnecessary administrative burden and substandard audit work. It is suggested that alternatives to ISA audit opinion be considered for small/medium enterprises and micro finance credit providers.

5. Summary and Conclusion

Primary research methods involved extracting data from the Business Registry Database in Kosovo, interviews and discussions with leading regulators, leaders from the profession and donors involved in the region, and also the business and audit community in Kosovo.

Given the current level of development of the audit profession in Kosovo, it may be appropriate that the regulatory bodies prepare a quality assurance regulation that sets out the minimum requirements that audit firms (medium and small) must have in place in the next 2 years.

Training on the new law for Corporate Financial Reporting will be needed to ensure understanding of the legal requirements that businesses must comply: the requirement to submit financial statements to the Business Registry Office by the due date, the functions and authority of the regulatory body with special reference to the approval of statutory auditors and audit firms, the audit requirement, and sanctions for non compliance with legal requirements

As is common elsewhere in the world, the international accounting firms have a professional obligation to assist the national regulatory boards and the professional associations in the development of the profession: participation of the firms' senior managers and partners would enhance the standing of the profession in the community as well as ensuring that decisions made by the regulatory board and the professional body are fair and balanced, technically correct and in the public interest. This has not been the case in Kosovo to date.

Individual professional accountants and auditors also have a responsibility to act not only out of personal interest but also with the public interest. Where these two

interests do not align, the individual concerned is obliged to declare his/her conflict of interest and ceases participation

A strategic recommendation is one that will have a long term effect on the investment climate of the economy as a whole, or a long term effect on an institution responsible for implementing an element of economic or social reform.

It is recommended that the regulatory bodies encourage senior executives of business enterprises to better use the resources of their internal audit functions through discussions with the external auditor about re-orienting internal audit procedures and priorities so as to add value and to support the work of the external auditor.

Statutory audits are required for the benefits of current investors as well as for the protection of the public interest.

6. References

Aisbitt, S. & Nobes, C. (2001). The true and fair view requirement in recent national implementations. *Accounting and Business Research*, 31: 2, pp. 83-90.

Bailey, D., (1995). Accounting in the transitional economy. *European Accounting Review*, 4:4, pp. 595-623.

EC COM 2005/534 (2005). Comprehensive monitoring report of the state of preparedness for EU membership of Bulgaria and Romania. European Commission, 25th October 2005, available at http://www.europa.eu.int/comm/enlargement/report_2005/index.htm.

EC COM 2005/561 (2005). 2005 Enlargement Strategy Paper. *European Commission, 9th November 2005*, available under the heading candidate and potential candidate countries, strategy paper at http://www.europa.eu.int/comm/enlargement/report_2005/index.htm.

Evans, L, (2004). Language, translation and the problem of international accounting communication. *Accounting, Auditing & Accountability Journal*, 17:2, pp. 210-248.

Garrod, N., Turk, I. (1995) The development of accounting regulation in Slovenia. *European Accounting Review*, 4:4, pp. 749-764.

Garrod, N. (2000). Environmental contingencies and sustainable modes of corporate governance. *Journal of Accounting and Public Policy*, 19, pp. 237-261.

Gray, S.J. (1988). Towards a theory of cultural influence on the development of accounting systems internationally. Abacus, 24:1, pp. 1-15.

Harding, F. (2000). What is the role of Europe in an increasingly harmonised world? *European Accounting Review*, 9:4, pp. 593-601.

Hegarty, J., Gielen, F., Hirata Barros, A.C. (2004). Lessons learned from the World Bank's Accounting and Auditing ROSC program. World Bank, available at http://www.worldbank.org/ifa/LessonsLearned_ROSC_AA.pdf.

Heutger, V. (2004). A more coherent European wide legal language. European Integration Online Papers (EioP), 7:2. Available at: http://www.eiop.or.at/eiop/texte/2004-002.htm.

Hofstede, G. (1983). Dimensions of national cultures in fifty countries and three regions. In Deregowski, J.B., Dziurawiec, S., and Annis, R., (eds), Expectations in Cross-Cultural Psychology, Swets and Zeitlinger, Netherlands (now Taylor and Francis Group publishers).

IFAC International Federation of Accountants, (2005). The International Accountancy Profession: Acting in the Public Interest. *Speech by IFAC President Graham Ward to the CCAB at Brussels* on March 3, 2005. Available at http://www.ifac.org/MediaCenter/?q=node/view/89.

IFAC International Federation of Accountants (2010). Guide on Quality Control for Small and Medium Sized Practices.

Kosmala-MacLullich, K., Sucher, P. (2005) A local realisation of auditor independence construct in Poland: countering 'iron curtain' syndrome in academic writing. *Critical Perspectives on Accounting*, 16, pp. 593-632

Larson, R., Street, D. (2004). Convergence with IFRS in an expanding Europe: progress and obstacles identified by large accounting firm's survey. *Journal of International Accounting, Auditing and Taxation*, 13, pp. 89-119.

MacLullich, K.K. (2003). The true and fair view construct in the context of the Polish transition economy: some local insights. *European Accounting Review*, 12:3, pp. 465-487.

Nobes, C.W. (1992). International classification of financial reporting. 2nd ed. London: Croom Helm.

Petrovic, M., Turk, I. (1995). History, theory and practice of accounting in Yugoslavia. *European Accounting Review*, 4:4, pp. 809-826.

World Bank (2006). *Report on the observance of standards and codes-accounting and auditing*. Kosovo: Available at http://www.worldbank.org/ifa/rosc_aa_kos.pdf.

Seal, W., Sucher, P., Zelenka, I. (1995). The changing organisation of Czech accounting. *European Accounting Review*, 4:4, pp. 659-684.

Seal, W., Sucher, P., Zelenka, I. (1996). Post-socialist transition and the development of an accountancy profession in the Czech Republic. *Critical Perspectives on Accounting*, 7, pp. 485-508.

Sikka, P. (2001). Regulation of accountancy and the power of capital: some observations. *Critical Perspectives on Accountancy*, 12:2, pp. 199-211

Smith, M. (2003). Research Methods in Accounting. London: Sage Publications.

Sucher, P., Bychkova, S. (2001). Auditor independence in economies in transition: a study in Russia. *European Accounting Review*, 10:4, pp. 817-841.

Sucher, P., Kosmala-MacLullich, K., (2004). A construction of auditor independence in the Czech Republic: local insights. *Accounting, Auditing and Accountability Journal*, 17:2, pp. 276-305.

Van Der Plaats, E. (2000). Regulating auditor independence. *European Accounting Review*, 9:4, pp. 625-638.

Van Hulle, K, (2004). 2004: the year of truth. Balance Sheet, 12:2, pp. 14-15.

West, B. (2003). Professionalism and Accounting Rules. New York: Routledge.

Review of Relationship Between Increase of Capital and Shares Return in Automotive and Cement Industries at Tehran Stocks Exchange

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Abstract: This study is intended to consider relationship between Increase of capital and Shares return in Automotive and Cement industries at Tehran Stocks Exchange. Statistical population under this study consists of any related companies to Automotive and Cement industries which were accepted in Tehran Stocks Exchange during 2005 to 2010. The Statistical population has been divided to experimental and control group, while experimental group faced with increase in capital the other group was not; 27 companies from first group and 12 companies of second group were chosen as statistical samples under this study. Student's T-test and paired T-test were utilized in order to test hypotheses of this study and 19SPSS software was applied for analyzing data. Results have indicated increase in capital is not positive factor to increase in shares return. On the other hand, there is no impact of increasing in capital on shares return in the companies of Automotive and Cement industries which were accepted at Tehran Stocks Exchange.

Keywords: financial resources; financial managers; economic policy.

JEL Classification: G29

1. Introduction

Nowadays factors such as rapid growth of general price index, raising in exchange rate, inadequacy of financial resources in banks and increasing in prices of loans and credits have caused companies want to increase their capital through issuing ordinary shares in order to perform developed projects. Meantime, Tehran Stocks Exchange has played relatively useful role to attract small capital and lead them to productive activities since its revivification in 1989. Although, maintaining the process or playing more effective role in this field strongly depend on developing

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relative consistency in shares price, communicating logical connection between shares price and shares return and prevention from damages to investors which are not logic. Evidently accepted company in Tehran Stocks Exchange have required to capital in order to keep on their activities, but there is a point that must be considered by financial managers from those companies, they shall have chosen a resource by careful review and analysis; therefore, the resource must involve lower costs as well as considering to economic policy which is logic in applying supplied funds. As it mentioned above, relationship between Increase of capital and Shares return in Automotive and Cement industries which are accepted at Tehran Stocks Exchange would be discussed in this study.

2. Literature and Background

There are deferent ideas about selecting a strategic to issue new shares which are ordinary, (Chandra, 2001) in order to supply financial resource in a company. The followers of these ideas can be divided into three groups in general; this categorization is based on their view about impact of issuing new ordinary shares on efficiency and wealth of shareholders; so that, in accordance to practical and scientific reasons, they have treated issuing new ordinary shares as a positive, natural and negative factor on shareholder's wealth respectively (Angelo & Masulis, 1980).

First group believe that the process of issuing new ordinary shares has no impact on shareholder's wealth (Scott, D. 1988). This group has emphasis on theoretical grounds in shares pricing after dividing profit or issuing new shares and they also expressed that there is no relationship between structures of company's capital with company's value. As per theoretical grounds in stock dividend pricing and subscription privilege, new value, which is equal with reduced sum from primary shares price, has been developed for shareholder. Investors' treatment and somehow demand and supply mechanism in a semi efficient market might have determined shares price, this process is based on shareholders knowledge of company's real value. Conversely, this group understand that paying any earning to shareholder or changing in structure of capital has not affected on company's value; therefore, if the issuance of new shares and the payment of stock dividend has no impact on total value of a company it won't impact on shareholder wealth who owns a part of the company. (Clifford & Smith, 1977)

Second group believe that the issuance of new shares will caused increase in shareholder wealth. In most business plans which are provided for the process of issuing new shares, the managers shall have defended from selling new shares as a reasonable way to supply financial resource of the company. They have stated that issuance of new shares can be utilized by paying attention to specific conditions of getting loan and impossibility of applying it forever (Myers, & Majluf, 1984). This

new financial resources are going to invested in projects of the investment company, which will bring reasonable efficiency for company and then shareholder. Whereas, if the new shares have sold only to present shareholder, their ownership would not be change in company, it means their right of ownership and their right of controlling present shareholder would be saved. Also price of each company's shares in market may have been reduced by issuing new shares, the value of new shares has covered this reduced price (Lucas, 1990).

Reducing shares price will cause increase in demand of buying shares and subsequently their price. Involving low-income people into the company's shareholder is a kind of social purpose of issuing new shares.

Third group believe that the issuance of new shares will reduce shareholder wealth, they mean, this process has ended in raising the number of company's shares and subsequently increase in supplying shares will result from additional number of shares, in other words it causes stock watering¹. Whereas, if parts of new shares which are issued, have been exposed on public sales instead of selling to present shareholders, they would lose some rights to control the company. This group has stated that even if obtained new resources have been invested in profitable projects they would be link to risk.

In recent years, managers of companies, which are accepted in Tehran Stocks Exchange, usually have been applying the issuance of new shares as available tool to financing. Additional needs to financial resources and liquid deficiency, passing limitation in granting bank facilities to the company and macroeconomic policy making based on attracting liquidity to stock exchange, are apparent reasons to show how financing is critical.

It seems that if changes of shareholders wealth during different periods in which companies capital have been increased by issuing new shares, can be measured by acceptable criteria and if a reasonable comparison can be conducted between changes in shareholders wealth against changes in companies capital, assuming that other affecting factors on shareholders wealth are constant, implications of the management decisions based on increase in company capital will be tested practically.

According to the arguments given above, by using theoretical debates and performance of market, as a method of measuring shareholders wealth, in this study is tried to answer the question, whether there is any relationship between increase in capital and shares return in Automotive and Cement industries which are accepted at Tehran Stocks Exchange?

121

¹Watered stock: shares of stock of a corporation which have been issued at a price far greater than true value. In this case, the actual value of all shares is less than the value carried on the books of the corporation.

Following general model has been applied to calculate total return for each share in this research.

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total\ return = \\ \underline{payable\ cash\ devidend + subscription\ privilege\ benefits + bouns\ shares\ benefits + (final\ price - opening\ price)} \\ opening\ share\ price
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In 1997 Hajivand in a research: "Analytic experiment about the influence of information transmission related to increase in capital on shares price of companies which accepted Tehran Stocks Exchange" had concluded that companies has been utilizing increase in capital as the most important financial resource to financing and then it makes increase in the risk of future management and reduce in future shares return greatly.

In 1999 Taheri in a research: "Reviewing rate of justifiability in applying of using methods of capital to financing and its impact on return for companies accepted in Tehran Stock Exchange" had found that increase in capital expressed in a way which without proper returns and high capital cost, Tehran Stock Exchange will be faced with the risk and also an overview on the shares price of companies which had attempted to increase in capital has been shown that shareholders have obtained unusual returns after announcing date of increase in capital.

In a research "Implication of increase in capital on shares price and risk of companies which are accepted in Tehran Stock Exchange" that had been conducted by Abdulrahmanian in 2003, he found that shares price in companies have reduced after the process of increase in capital. In fact the process of supplying new shares contains new information, such as reduce in expected profit or increase in risk; however, it will show negative view of company's future to investors.

In 2006 Ahmadi has considered different aspects of increase in capital and effective factors on the process of determining shares price in market since increase in capital and also he has paid attention to existence or non-existence of the relationship between Price Elasticity of Demand for shares and price changing, it made him to conclude that there is a positive relationship between Price Elasticity and volume of transactions.

Myers and Majluf in 1990 have attempted to compare shares return before and after the process of increase in capital and through this way, they have provided reasonable strategies for the companies in order to issue new shares. Companies have been divided into two groups by them: over-value and low- value; and then have stated that the process of issuing new shares require a delay at low-value's companies which have lower market's value than the real value until their shares price reach to real price in market. Conversely, issuing new shares must be accelerated in over-value's companies which have higher market's value than real value.

3. Research Method

Since this study seek to review the relationship between increase in capital and shares return in Automotive and Cement industries which are accepted in Tehran Stocks Exchange; therefore, the method if this research is causal-comparative. Beside the fact, the present study is ex post facto which means it has been conducted through analyzing past information like financial statements from companies (Hafeznia, 2006, p. 67).

Because financial reports from joined companies in Tehran Stocks Exchange are greatly reliable, to conduct this study the reports are used as main information resource. Given reports were obtained through Tehran Stocks Exchange website; including basic financial statements of companies which are examined during 2005 to 2010.

3.1. Research Hypotheses

Original Hypothesis

Increase in capital affects shares return in Automotive and Cement industries which are accepted in Tehran Stocks Exchange.

First Secondary hypothesis: Mean of shares return in companies which have accomplished to increase in capital only one time in 2010, is different from mean of shares return in companies which have not increased their capital.

Second secondary hypothesis: Mean of shares return in companies which have carried out increase in capital for two years sequentially, 2008 and 2009, are so different from mean of shares return in companies which have not increased their capital during this two years.

Third secondary hypothesis: Mean of shares return in companies which have carried out increase in capital for two years discretely, 2005 and 2007, are so different from mean of shares return in companies which have not increased their capital during this two years.

Forth secondary hypothesis: Increase in capital of companies which have conducted this process for only one time in 2010 is made to increase in shares return at those companies.

Fifth secondary hypothesis: Increase in capital of companies which have conducted this process for two sequence years of 2008 and 2009 is made to increase in shares return at those companies.

Sixth secondary hypothesis: Increase in capital of companies which have conducted this process for two years of 2005 and 2007 discretely is made to increase in shares return at those companies.

3.2. Statistical population

Statistical population under this study consists of any related companies to Automotive and Cement industries which are accepted in Tehran Stocks Exchange till end of 2010 that included 78 companies.

Statistical population is containing experimental and control group. Companies that have increased their capital between the years 2005 to 2010, are determined as experimental group to check impact of increase in capital on shares return and Companies that have not increased in capital between the years 2005 to 2010, are set as control group in order to compare their return with the companies which have increased the capital.

4. Results

In order to conduct testing of first to third hypotheses, Student's T-test is applied to compare means of two separate groups, one group which has increased their capital and the other which has not. Paired T-test has been used for forth to sixth hypotheses.

Testing first secondary hypothesis:

According to the obtained tables and values for sig and testing statistics, we can accept null hypothesis because of value of sig is equal to 0.05. On the other hand, there is no difference between mean of shares return in companies which have accomplished to increase in capital only one time in 2010 with mean of shares return in companies which have not increased their capital. This capital increasing has not led to change in companies' shares return in comparison with companies do not increase their capital.

Testing second secondary hypothesis:

As the value of sig would be more than 0.05 we concluded that the null hypothesis is acceptable, as for the obtained tables and values for sig and testing statistics. In other word, there is not any difference between mean of shares return which is related to the companies have carried out increase in capital for two years of 2008 and 2009 sequentially and mean of shares return in companies which have not increased their capital during this two years. This capital increasing has not led to change in companies' shares return in companies with companies do not increase their capital during the given years.

Testing third secondary hypothesis:

As for the obtained tables and values for sig and testing statistics, since the value of sig would be more than 0.05 we have accepted the null hypothesis. On the other hand, there is no difference between Mean of shares return in companies which

have carried out increase in capital for two years discretely, 2005 and 2007 and Mean of shares return in companies which have not increased their capital during this two years. it means that the process of increasing in capital during the discrete years has not led to change in companies' shares return in comparison with companies do not increase their capital in that time.

Testing forth secondary hypothesis:

As regards to the sig and testing statistics' values, because of sig's value that is more than 0.05, the null hypothesis can be accepted. It means that increase in capital of companies which have conducted this process for only one time in 2010 is not lead to increase in shares return at those companies.

On the other hand, increase in capital has not made any positive change in shares return compared with the time before capital increasing and this capital increasing has not affected increase in return.

Testing fifth secondary hypothesis:

In accordance with the sig and testing statistics' values, the value of sig is more than 0.05 and so, the null hypothesis can be accepted.

Increase in capital of companies which have conducted this process for two sequence years of 2008 and 2009 is not made to increase in shares return at those companies.

Increase in capital for two times sequentially has not made any positive change in shares return compared with the time before capital increasing.

Testing sixth secondary hypothesis:

As regards to the sig and testing statistics' values, because of sig's value that is more than 0.05, the null hypothesis can be accepted.

It means that increase in capital of companies which have conducted this process for two years of 2005 and 2007 discretely is not made to increase in shares return at those companies.

Increase in capital for two times discretely has not made any positive change in shares return compared with the time before capital increasing.

5. Discussion and Conclusion

Following statements are obtained results from testing the given hypotheses:

Increase in capital only one time has not led to any changes in shares return that belong to the companies which have accomplished to increase in capital in comparison with the companies which have not;

If the companies have carried out increase in capital for two years sequentially it would not lead to any changes in shares return, in comparison with those have not increased their capital;

If the companies have carried out increase in capital for two years discretely it would not lead to any changes in shares return, in comparison with those have not increased their capital;

Increase in capital only one time has not made any positive change in shares return compared with the time before capital increasing and this capital increasing has not affected increase in return;

Increase in capital for two times sequentially has not made any positive change in shares return compared with the time before capital increasing;

Increase in capital for two times discretely has not made any positive change in shares return compared with the time before capital increasing;

Generally obtained results from those hypotheses have indicated that increase in capital cannot be positive factor to increase in shares return. These results which are obtained from secondary hypotheses can make a conclusion about the original hypothesis, so that the null hypothesis has been accepted. It means that increase in capital of the companies related to Automotive and Cement industries which were accepted in Tehran Stocks Exchange during 2005 to 2010 has not affected their shares return. Obtained results from testing the original hypothesis is confirmed by group of researchers such as Miler & Modigilani, 1961, which have believed company's value has not been impressed by any changes in capital structure

6. References

Chandra. P. (2001). Financial management, theory and practice. With Thomson ONE - Business School Edition 1st-Year Printed Access Card.

Scott, D. (1988). Basic financial management. Prentice Hall.

Clifford, J. & Smith, G. (1977). Alternative methods for raising Capital: Rights Versus under written Offerings. *Journal of Financial Economics*, 5, pp. 273-307.

Lucas, D. (1990). Equity issues and stock price Dynamics. Journal of Finance. pp. 1019-1040.

Angelo, H. & Masulis, R. (1980). Optimall capital structure under corporate and personal taxation. *Journal of Financial Economics*. 8, pp. 3-29.

Myers, S. & Majluf, N (1984). Corporate Financing and Investment Decisions when Firms Have Information that Investors do not have. *Journal of Financial Economics*. 13, pp. 187-221.

Mathematical and Quantative Methods

The Consumer's Behavior after the Preferences Nature

Catalin Angelo Ioan¹, Gina Ioan²

Abstract: The paper treats the consumer behavior after the nature of its preferences. There are analyzed in terms of Marshall demand, the perfectly substitutable, the perfectly complementary, the case of independently goods in the meaning of utility, the case of separable goods in the meaning of utility and the neutral goods. Significant for the results is that n goods are treated simultaneously with generalized utility functions instead the classical theory.

Keywords: consumer; demand; utility

JEL Classification: D01

1. Introduction

The classical theory of consumer's behavior in relation to the income analyze usually the choice's optimization from a basket of two goods situated in different preference relations to each other.

Although the current theory requires that this onset is sufficient, saying that for a good fixed, the basket of other goods can be considered as a whole, we will try to impose a new approach, treating each of them individually.

We believe that this approach is more realistic, because a change in the structure of consumption of a good influence on each other goods (with separate prices and specific dependency relations).

In the first part of the article we will briefly review known results on the application in Marshallian or Hicksian terms, then we customize and resolve these issues for five categories of goods, namely: perfectly substitutable goods, perfectly complementary goods, goods independent in the meaning of utility, separable goods in the meaning of utility and neutral goods.

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2. The Marshall Demand

Let a consumer faced with a choice of any number of quantities of goods $B_1,...,B_n$, SC - their space consumption and the sale prices: $p_1,...,p_n$. We assume that all available income V can be assigned to act consumer buying, his preferences being not affected by the size of V. We say, in this case, that the demand for goods is unmatched. Let also be a utility function U:SC $\rightarrow \mathbf{R}_+$. Considering the budget zone

 $ZB=\{(x_1,...,x_n)\in SC \mid \sum_{i=1}^n p_i x_i \leq V\}$ we put the problem of determining the consumption basket so that utility is maximum.

The problem becomes:

$$\begin{cases} \max \ U(x_1,...,x_n) \\ \sum_{i=1}^n p_i x_i \leq V \\ x_1,...,x_n \in SC \end{cases}$$

It can be show that while the function U is concave and SC – convex, then the optimal solution of the problem is located on the border zone of the budget, satisfying the conditions:

$$\begin{cases} \max \ U(x_1,...,x_n) \\ \sum_{i=1}^{n} p_i x_i = V \\ x_1,...,x_n \in SC \end{cases}$$

The new problem, is therefore to determine the function U extremes when the variables are subject to links. We will apply the Lagrange multiplier method.

Let therefore: $L(x_1,...,x_n,\lambda)=U(x_1,...,x_n)+\lambda\left(\sum_{i=1}^n p_i x_i-V\right)$. The extreme conditions are:

$$\begin{cases} \frac{\partial L}{\partial x_{i}} = 0, i = \overline{1, n} \\ \frac{\partial L}{\partial \lambda} = 0 \end{cases}$$

from where:

$$\begin{cases} U_{m,i} + \lambda p_i = 0, i = \overline{1, n} \\ \sum_{i=1}^{n} p_i x_i - V = 0 \end{cases}$$

U_{m,i} being the marginal utility corresponding to the i-th good.

From the first n relations, we deduce $\lambda = -\frac{U_{m,i}}{p_i}$, $i = \overline{1,n}$ and or otherwise:

$$\frac{U_{m,1}}{p_1} = ... = \frac{U_{m,n}}{p_n}$$
 - the Second Law of Gossen

Solving now the characteristic system:

$$\begin{cases} \frac{\mathbf{U}_{m,l}}{p_l} = \dots = \frac{\mathbf{U}_{m,n}}{p_n} \\ \sum_{i=1}^{n} p_i \mathbf{x}_i = \mathbf{V} \end{cases}$$

follows the solution of the problem:

$$\begin{cases} \overline{x}_1 = f_1(p_1,...,p_n, V) \\ & \dots \\ \overline{x}_n = f_n(p_1,...,p_n, V) \end{cases}$$

The restriction of the function U at the hyperplane $\sum_{i=1}^n p_i x_i = V$ has the same nature asU, therefore it is concave. As this result, the point $(\overline{x}_1,...,\overline{x}_n)$ is a local maximum.

3. The Hicks Demand

Let now the same consumer who wants a given level of utility in conditions that it is willing to allocate the lowest income to achieve its goals. We will say, in this case, that the demand for goods is compensated. Considering the utility function $U:SC \rightarrow \mathbf{R}_+$ and u the desired utility, the problem of determining the consumption basket so that allocated income be minimum is:

$$\begin{cases} \min \sum_{i=1}^{n} p_i x_i \\ U(x_1, ..., x_n) \ge u \\ x_1, ..., x_n \in SC \end{cases}$$

As in the previous section, we obtain that, while the objective function is linear, it is convex, in particular, so the optimal solution of the problem is located on the boundary of the zone $U(x_1,...,x_n) \ge \overline{u}$.

The problem becomes:

$$\begin{cases} \min \sum_{i=1}^{n} p_{i} x_{i} \\ U(x_{1},...,x_{n}) = u \\ x_{1},...,x_{n} \in SC \end{cases}$$

We apply the Lagrange multiplier method again and also, because the objective function is linear, it has null second differential and the preferred consumption zone of any $x \in SC$ is convex. The restriction of the objective function at $U(x_1,...,x_n)=\overline{u}$ is convex, therefore the stationary points of the Lagrangian will be points of local minimum.

Let therefore $L(x_1,...,x_n,\lambda) = \sum_{i=1}^n p_i x_i + \lambda \left(U(x_1,...,x_n) - \overline{u} \right)$. The extreme conditions

are:

$$\begin{cases} \frac{\partial L}{\partial x_i} = 0, i = \overline{1, n} \\ \frac{\partial L}{\partial \lambda} = 0 \end{cases}$$

or

$$\begin{cases} p_i + \lambda U_{m,i} = 0, i = \overline{1, n} \\ U(x_1, ..., x_n) - \overline{u} = 0 \end{cases}$$

From the first n relations, we deduce:

$$\lambda \!\!=\! -\frac{p_i}{U_{m,i}}\,,\, i \!=\! \overline{1,n}$$

and or otherwise:

$$\frac{U_{m,1}}{p_1} = ... = \frac{U_{m,n}}{p_n}$$
 - the Second Law of Gossen

Solving now the characteristic system:

$$\begin{cases} \frac{U_{m,l}}{p_{l}} = ... = \frac{U_{m,n}}{p_{\underline{n}}} \\ U(x_{1},...,x_{n}) = u \end{cases}$$

follows the solution of the problem:

$$\begin{cases} \widetilde{\mathbf{x}}_1 = \mathbf{g}_1(\mathbf{p}_1, ..., \mathbf{p}_n, \mathbf{u}) \\ & \cdots \\ \widetilde{\mathbf{x}}_n = \mathbf{g}_n(\mathbf{p}_1, ..., \mathbf{p}_n, \mathbf{u}) \end{cases}$$

The analysis of the two types of demands shows that income hyperplane must be tangent to the utility hypersurface.

Because the tangent hyperplane at an arbitrary point has parameters: $U_{m,1},...,U_{m,n}$ and the hyperplane of income: $p_1,...,p_n$, the condition of the problem leads to the proportionality of them, so to the Gossen's Second Law.

Another aspect that deserves to be considered is the economic interpretation of λ from the two methods of Lagrange multipliers.

In the case of Marshall demand, we have $dV \! = \! \sum\limits_{i=1}^{n} p_i dx_i$. On the other hand, from

 $Gossen's \ \ Second \ \ Law: \ \ U_{m,i}\!\!=\!\!-\lambda p_i, \ \ i\!=\!\overline{1,n} \quad therefore: \ \ -\lambda dV = -\lambda \sum_{i=1}^n p_i dx_i = \sum_{i=1}^n U_{m,i} dx_i$

=dU or $\lambda = -\frac{dU}{dV}$. Therefore, in the case of Marshall demand, λ multiplier is the opposite marginal utility of income.

In the Hicks case, we have $dU = \sum_{i=1}^{n} U_{m,i} dx_i$. Again, from Gossen's Second Law:

 $U_{m,i}$ =- λp_i , $i=\overline{1,n}$ which implies: $dU=-\lambda\sum_{i=1}^n p_i dx_i = -\lambda dV$ hence the same meaning of λ

4. The Consumer's Behavior after the Preferences Nature

4.1. The Consumer's Behavior for Perfectly Substitutable Goods

Let be a lot of goods perfect substitutes $B_1,...,B_n$, SC – their space of consumption and sale prices: $p_1,...,p_n$. If a consumer has an income V and directs his choice after the utility function $U(x_1,...,x_n)=a_1x_1+...+a_nx_n$, $a_i>0$, $i=\overline{1,n}$.

We put the question of Marshall optimization to maximize the utility.

We saw in that necessary and sufficient conditions for maximum are:

$$\begin{cases} \frac{U_{m,1}}{p_1} = ... = \frac{U_{m,n}}{p_n} \\ \sum_{i=1}^{n} p_i x_i = V \end{cases}$$

which leads, because $U_{m,i}=a_i$, $i=\overline{1,n}$ to:

$$\begin{cases} \frac{a_1}{p_1} = \dots = \frac{a_n}{p_n} \\ \sum_{i=1}^n p_i x_i = V \end{cases}$$

Like a conclusion, if $\frac{a_1}{p_1} = ... = \frac{a_n}{p_n}$ then all the points of the budget hyperplane

 $(\overline{x}_1,...,\overline{x}_n)$ where $\sum_{i=1}^n p_i \overline{x}_i = V$ are optimal components of the consumer basket.

If $\exists i \neq j = \overline{1, n}$ so that: $\frac{a_i}{p_i} \neq \frac{a_j}{p_j}$ then the system is incompatible, so there are no

solutions inside the budget hyperplane (the zone bounded by the coordinates hyperplanes).

In this case, we consider the comparison of the utility function on the intersection between the budget hyperplane and the coordinates hyperplanes.

Let therefore the partition $I=\{1,...,n\}$: $I=I_1\cup...\cup I_k$, $I_p\cap I_t=\emptyset$ such that $\forall u,v\in I_p$ we have: $\frac{a_u}{p_u}=\frac{a_v}{p_v}$ and $\forall u\in I_p$, $v\in I_t$, $p\neq t$: $\frac{a_u}{p_u}\neq\frac{a_v}{p_v}$. The partition of I consists of sets of indices for which ratios are equal.

Consider now that $\exists u \in I_p \ \exists v \in I_t \ \text{with p} \neq t \ \text{such that } x_u \neq 0 \ \text{si} \ x_v \neq 0$. From the general problem of extremes with links, we have: $\frac{a_u}{p_u} = \frac{a_v}{p_v}$ that conflicts with $I_p \cap I_t = \emptyset$.

Following these considerations, it follows that if $\exists u \in I_p$ such that $x_u \neq 0$ then $x_v = 0$ $\forall v \in I - I_p$. In this case, the problem becomes:

$$\begin{cases} \frac{a_u}{p_u} = \frac{a_v}{p_v} \forall u, v \in I_p \\ \sum_{u \in I_p} p_u x_u = V \end{cases}$$

with the optimal solution $(\overline{x}_u)_{u \in I_p}$ consisting of all data points locus given by $\sum_{u \in I_p} p_u x_u = V$, the maximum utility being: $U = \sum_{u \in I_p} a_u x_u$. Comparing the maximum utility values, corresponding to all elements of partition, we obtain the optimal consumption basket. This problem is very simple. Thus, noting $\lambda_p = \frac{a_u}{p_u} \quad \forall u \in I_p$ we have $a_u = \lambda_p p_u$ therefore $U = \sum_{u \in I_p} \lambda_p p_u x_u = \lambda_p V$. From these facts, we will get the maximum utility for $\lambda_p = \max_{u \in I_p} \lambda_p p_u x_u = \lambda_p V$. From these facts, we for each of the elements of the partition of I, the corresponding locus being $\sum_{u \in I_p} p_u x_u = V$ corresponding to p such that $\lambda_p = \max_{u \in I_p} p_u x_u = V$

In particular, for two perfectly substitutable goods, we have: $\frac{a_1}{p_1} = \frac{a_2}{p_2}$. If this condition occurs, then the optimal consumption basket is given by pairs: $(\overline{x}_1, \overline{x}_2)$ where $\sum_{i=1}^n p_i \overline{x}_i = V$. If $\frac{a_1}{p_1} \neq \frac{a_2}{p_2}$ we have the following situations:

- $\frac{a_1}{p_1} > \frac{a_2}{p_2}$ involves the optimal consumption basket: $(\overline{x}_1, \overline{x}_2) = (\frac{V}{p_1}, 0)$;
- $\frac{a_1}{p_1} < \frac{a_2}{p_2}$ involves optimal consumption basket: $(\overline{x}_1, \overline{x}_2) = (0, \frac{V}{p_2})$.

4.2. The Consumer's Behavior for Perfectly Complementary Goods

In the case of perfectly complementary goods, we have: $U(x_1,...,x_n)=min(a_1x_1,...,a_nx_n)$, $a_i>0$, $i=\overline{1,n}$.

Let the budget hyperplane: $\sum_{i=1}^{n} p_i x_i = V$ and $U_0 > 0$ – fixed.

Let consider now the point $\overline{x} = (\overline{x}_1, ..., \overline{x}_n)$ for which: $a_1 \overline{x}_1 = ... = a_n \overline{x}_n = U_0$.

We have therefore $U(\overline{x}_1,...,\overline{x}_n)=U_0$. The condition that \overline{x} to be on the budget hyperplane is: $\sum_{i=1}^n p_i \overline{x}_i = V$ or otherwise: $\sum_{i=1}^n \frac{p_i}{a_i} U_0 = V$ where: $U_0 = \frac{V}{\sum_{i=1}^n \frac{p_i}{a_i}}$.

Let then show that if $(x_1,...,x_n)$ belongs to the budget hyperplane, then the maximum utility is $U_0 = \frac{V}{\sum\limits_{i=1}^n \frac{p_i}{a_i}}$ and is obtained for $\overline{x} = (\overline{x}_1,...,\overline{x}_n)$ where

$$\overline{x}_j = \frac{V}{a_j \sum_{i=1}^n \frac{p_i}{a_i}}, j = \overline{1, n}.$$

Let therefore $\sum_{i=1}^n p_i x_i = V$ or else: $\sum_{i=1}^n a_i \frac{p_i}{a_i} x_i = V$ and note, for the simplicity: $\frac{p_i}{a_i} = q_i$ and $a_i x_i = y_i$. We have: $\sum_{i=1}^n q_i y_i = V$. Suppose now that $\exists 1 \le i \le n$ such that $y_i \ne \frac{V}{\sum_{i=1}^n q_i}$

If $y_i \ge \frac{V}{\sum\limits_{i=1}^n q_i}$, $i = \overline{1,n}$ then: $V = \sum\limits_{i=1}^n q_i y_i \ge \sum\limits_{i=1}^n q_i \frac{V}{\sum\limits_{i=1}^n q_i} = \frac{1}{\sum\limits_{i=1}^n q_i} \sum\limits_{i=1}^n q_i V = V$ from where: $y_i = \frac{V}{\sum\limits_{i=1}^n q_i}$ i = $\overline{1,n}$ - contradiction

 $y_i \!\!=\! \frac{V}{\sum\limits_{i=1}^n q_i}$, $i \! = \! \overline{1,n}\,$ - contradiction.

 $\label{eq:therefore: problem} Therefore: \ \exists 1 \leq j \leq n \ such \ that: \ y_i < \frac{V}{\sum\limits_{i=1}^n q_i} \ . \ In \ this \ case: \ a_i x_i = y_i < \frac{V}{\sum\limits_{i=1}^n q_i} \ where:$

$$U(x_1,...,x_n) = min(a_1x_1,...,a_nx_n) < \frac{V}{\sum\limits_{i=1}^n q_i} = U_0.$$

After these facts, we obtain that any point on the budget hyperplane different from \bar{x} will have a lower utility.

In particular, for two perfectly complementary goods, we have:

$$\overline{x}_1 = \frac{V}{a_1 \left(\frac{p_1}{a_1} + \frac{p_2}{a_2}\right)} = \frac{a_2 V}{p_1 a_2 + p_2 a_1} \text{ and } \overline{x}_2 = \frac{V}{a_2 \left(\frac{p_1}{a_1} + \frac{p_2}{a_2}\right)} = \frac{a_1 V}{p_1 a_2 + p_2 a_1}$$

4.3. The Consumer's Behavior in the Case of Goods Independent in the Meaning of Utility

In the case of this type of goods, the utility function is:

$$U(x_1,...,x_n)=f_1(x_1)+...+f_n(x_n)$$
 with $f_i \in C^2(0,\infty)$, $f_i'' \le 0$, $i=\overline{1,n}$ and $f_1(0)+...+f_n(0)=0$

Because $U_{m,i}=f_i(x_i)$, $i=\overline{1,n}$, the necessary and sufficient conditions are:

$$\begin{cases} \frac{f_{1}(x_{1})}{p_{1}} = \dots = \frac{f_{n}(x_{n})}{p_{n}} \\ \sum_{i=1}^{n} p_{i}x_{i} = V \end{cases}$$

In the particular case of a utility function of the form:

$$U(x_1, x_2, ..., x_n) = x_1^{\alpha_1} + x_2^{\alpha_2} + ... + x_n^{\alpha_n} \text{ with } \alpha_i \in (0, 1), \ i = \overline{1, n}$$

we have:

$$\begin{cases} \frac{\alpha_1 x_1^{\alpha_1 - 1}}{p_1} = \ldots = \frac{\alpha_n x_n^{\alpha_n - 1}}{p_n} \\ \sum_{i=1}^n p_i x_i = V \end{cases}$$

Noting with λ the common values of the ratios, we get: $x_i = \left(\frac{p_i}{\alpha_i}\lambda\right)^{\frac{1}{\alpha_i-1}}$,

 $i=\overline{1,n}$. From the income relationship: $\sum_{i=1}^n p_i \left(\frac{p_i}{\alpha_i}\lambda\right)^{\frac{1}{\alpha_i-1}} = V$ where:

$$\sum_{i=1}^n \frac{p_i^{\frac{\alpha_i}{\alpha_i-1}}}{\alpha_i^{\frac{1}{\alpha_i-1}}} \lambda^{\frac{1}{\alpha_i-1}} = V$$

If $\overline{\lambda}$ is a strictly positive solution of this equation, then the final solution is: $x_i = \left(\frac{p_i}{\alpha_i} \overline{\lambda}\right)^{\frac{1}{\alpha_i-1}}$, $i = \overline{1,n}$.

4.4. The Consumer's Behavior in the Case of Separable Goods in the Meaning of Utility

The separable utility function for such goods is:

 $U(x_1,...,x_n)=f_1(x_1)\cdot...\cdot f_n(x_n) \text{ with } f_i\in C^2(0,\infty), \ f_i(x)>0 \ \forall x>0,$

$$f_i'' \le 0, i = \overline{1, n}, f_1(0) \cdot ... \cdot f_n(0) = 0$$

and the quadratic form: $H = \sum_{i=1}^n \frac{f_i''}{f_i} \xi_i^2 + \sum_{i,j=1}^n \frac{f_i' f_j'}{f_i f_j} \xi_i \xi_j \ \text{ is negatively defined.}$

The necessary and sufficient conditions for maximum are:

$$\begin{cases} \frac{U\frac{f_1'}{f_1}}{p_1} = ... = \frac{U\frac{f_n'}{f_n}}{p_n} \\ \sum_{i=1}^n p_i x_i = V \end{cases}$$

or otherwise:

$$\begin{cases} \frac{f_1'}{p_1 f_1} = \dots = \frac{f_n'}{p_n f_n} \\ \sum_{i=1}^n p_i x_i = V \end{cases}$$

In the particular case of the Cobb-Douglas function:

$$U(x_1,x_2,...,x_n)=x_1^{\alpha_1}...x_n^{\alpha_n}, \alpha_i>0, \sum_{i=1}^n \alpha_i \le 1$$

we have:

$$\begin{cases} \frac{\alpha_1}{p_1 x_1} = \dots = \frac{\alpha_n}{p_n x_n} \\ \sum_{i=1}^n p_i x_i = V \end{cases}$$

Noting with λ the common value of the ratios, we get: $p_i x_i = \frac{\alpha_i}{\lambda}$, $i = \overline{1, n}$ hence from

the equality of the budget: $\sum_{i=1}^{n} \frac{\alpha_i}{\lambda} = V$ that is: $\lambda = \frac{\sum_{i=1}^{n} \alpha_i}{V}$, Finally we get: $x_j = \frac{\sum_{i=1}^{n} \alpha_i}{V}$

$$\frac{\alpha_{j}V}{p_{j}\underset{i=1}{\overset{n}{\sum}}\alpha_{i}}\text{, }j\text{=}\overline{1,n}\text{ .}$$

4.5. The Consumer's Behavior in the Case Neutral Goods

In the case of neutral goods B₁,...,B_m, the utility function is:

$$U(x_1,...,x_n)=f(x_{m+1},...,x_n)$$

where f is of class C^2 and concave. Because in the budget hyperplane: $\sum_{i=1}^{n} p_i x_i = V$

the neutral goods consumed financial resources without to bring more utility, the optimal allocation will exclude from the analysis and the optimization problem becomes:

$$\begin{cases} \frac{\partial f}{\partial x_{m+1}} = ... = \frac{\partial f}{\partial x_n} \\ \sum_{i=m+1}^n p_i x_i = V \end{cases}$$

5. Conclusion

The results obtained from the above analysis provides the optimal allocation of the demand of Marshall type, pointing out that in the case of perfectly substitutable goods proportionality coefficient the allocation depends of the proportionality of the coefficients of the utility function with goods prices.

If for perfectly complementary goods the issue is resolved completely, in the case of goods independent in the meaning of utility, the problem reduces to solving a nonlinear equation whose solution determines the actual allocation.

The last two issues of a general nature, specifically formulated the optimal conditions.

References

Chiang A.C. (1984). Fundamental Methods of Mathematical Economics. McGraw-Hill Inc.

Ioan C.A. (2012). A new approach to utility function (future publication).

Stancu S. (2006). Microeconomics. Bucharest: Economica.

Varian H.R. (2006). Intermediate Microeconomics. W.W.Norton & Co.

Tourism and Sustainable Development

The Role of Local Government in Sustainable Development

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Abstract: Depending where one looks you will find various definitions aimed at describing 'sustainability'. In lasts years the notion of sustainable tourism must be regarded as one of the great success stories of tourism research and knowledge transfer. It has become the first topic discourse in academic research, business fields and governance. The government takes responsibility for the social and economic development of the country. The government through the lows, programs, plans, and strategies oriented people to choose the tools in economy's branches and to walk in sustainable development without afraid for the future. One of the economic branches, that is qualified as friend of sustainable development is tourism. But tourism cannot develop in chaos by self without a strategy or a plan confirmed by specialist, who works in different sectors of public administrate in government. While, big or central government is occupied with macro-problem and macro-policies, local government is nearest community and it know better than anyone, their human and natural resources. The purpose of this article is to analyze the role of local governance systems for sustainable tourism. So, local government can be the first promoting and encouraging tourism development, and helping the community for sustainable tourism.

Keywords: local government; sustainable development; strategy and development plan; socialeconomic development

JEL Classification: Q01

1. Introduction

Tourism is advocated as a way for rural regions to build and diversify their economies (Thorn, 1994). In 1988 the OMT (Word Organization of Tourism), assuming the "sustainable development" approach defined in the previous year by WCED (World Commission on Environment and Development), proposed a

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discriminative value that hardly cannot be shared as for its extreme clearness: "
Tourist activities are sustainable when develop in order to maintain themselves as
vital as possible in a tourist area for a limitless period of time, and also when they
don't modify the environment and don't obstruct or inhibit the development of
other social and economical activities".

Tourists bring 'fresh money' into a host economy (McIntyre, 1993), and this initial spending by tourists has a multiplier effect, providing increased income and employment for residents as tourism operators spend their earnings. Tourism also provides employment. As a service industry, tourism is labour intensive and, as with income generation, has similar multiplier effects on employment (Lim, 1991a).

Local government can be directly and indirectly involved in sustainable tourism.

- a. Direct involvement absolute necessity in :Laws, Regulations, Provide infrastructure, Security safe environment (tourists & locals), attract crime, antiterrorism, stability, crossing international borders tourists,, transport, Limit tourism VISAS/ entry (nationality, volume), Laws on the use & renovation of heritage sites & buildings;
- **b.** Indirect involvement: Providing supports to the private sectors (hotel), Providing incentives to the private sectors to develop in locality (tax relief), Encourage proper use, appreciation of heritage sites and culture.

Enabling visitor growth and tourism development have not been traditional functions of local government, who have often seen their role as limited to providing the utilities and amenities required and administering necessary planning and development processes (Kearsley, 1997). But time pass and in all the structure of governance was understanding that local governance can have power not only in sustainable development but also in sustainable tourism development. Local governance get fast information's about the problems that have the community. Also local governance know with details natural resources and human capital so through the careful assessment it can plan the future to help the community in employments, local business, infrastructures etc.

2. Literature Review

Sustainable development was defined by the *United Nations World Commission on Environment and Development in the 1987 Brundtland* Report as "those paths of social, economic and political progress that meet the needs of the present without compromising the ability of future generations to meet their own needs." In 1993 – a year after the Earth Summit in Rio de Janeiro – the World Congress of Architects defined sustainability for the architectural fraternity as follows: "Sustainability

means meeting our needs today without compromising the ability of future generations to meet their own needs.

UIA/AIA World Congress of Architects, June 1993,A more recent – and broader – definition is the following of 1996: The concept of sustainability relates to the maintenance and enhancement of environmental, social and economic resources, in order to meet the needs of current and future generations. The three components of sustainability are:

- Environmental sustainability which requires that natural capital remains intact. This means that the source and sink functions of the environment should not be degraded. Therefore, the extraction of renewable resources should not exceed the rate at which they are renewed, and the absorptive capacity to the environment to assimilate wastes should not be exceeded. Furthermore, the extraction of non-renewable resources should be minimised and should not exceed agreed minimum strategic levels.
- Social sustainability which requires that the cohesion of society and its ability to work towards common goals be maintained. Individual needs, such as those for health and well-being, nutrition, shelter, education and cultural expression should be met.
- Economic sustainability which occurs when development, which moves towards social and environmental sustainability, is financially feasible.

Sustainable tourism presents a paradox. At one level sustainable tourism is a success given the concept's diffusion among industry, government, academics and policy actors. Yet, it is simultaneously a policy failure given the continued growth in the environmental impacts of tourism in absolute terms (C. Michael Hall, 2011).

One important study—by the Board *on Sustainable Development of the U.S. National Academy* of Sciences. In its report, Our Common Journey: "A Transition toward Sustainability, the board focused on the seemingly inherent distinction between what advocates and analysts sought to sustain and what they sought to develop, the relationship between the two, and the time horizon of the future

According to Wilkinson (1997b, p. 14), the pattern of tourism development in a particular receiving destination cannot be understood without an examination of that destination's plans and policies for resources and the environment in general

3. Some Critical Issues

Local Governance and Laws

An influx of visitors can have social impacts on host communities, such as congestion or increased crime rates, biophysical impacts through increased waste

production and damage to sensitive natural areas, and economic impacts, such as increased seasonal fluctuations. The growing contribution of tourism to environmental change while it is simultaneously being promoted as a means of economic growth suggests that sustainable tourism development is a significant policy problem and that policy making is a significant part of the governance process. That is, 'a sub-issue, issue or suite of issues perceived to require resolution in some way' (Dovers, 1995, p. 95), that poses the governance challenge of selecting an optimum set of policy actions and their associated implementation. Tourism development also has social impacts, for example, tourist hotels influencing young people to consume more alcohol, and biophysical impacts through discharge to water and soil (PCE, 1997).

The activities and responsibilities of territorial authorities have the greatest direct influence on management of tourism's adverse social and biophysical impacts. But to have the control on the territory local government needs lows. In case that some lows doesn't exist, or they the actual lows need some change local government can transmit, the request as a proposal to central government. Only with low and rules, local government can have control in the territory and be successful in governance. All actors in local government must know very well the natural resources and their economic value. In this way, through the lows they give the direction to habitants or all the others that are interested to invest and to have a regular activity, which, over all to be in full compliance with long-term development plans.

Local Governance and Plan for Development

Tourism has positive economic impact and creates opportunities, on employment, on gross income and production, but it may also have negative effects, particularly on the environment. The role of tourism on environmental and human development is necessarily ambiguous (Serdoura, Moreira & Almeida, 2009). On the one hand, while being an integrated economic activity, it is dependent on the changes of the territory and population, as it needs environmental and socio-economic quality to be viable (CTP, 2005). Unplanned and uncontrolled tourism growth can result in such a deterioration of the environment that tourist growth can be compromised. To develop a theoretical framework for tourism sustainability, we will assess the impacts of tourism development to environmental balance, accessibility, socioeconomic dynamics, territorial and social justice and equality on job opportunities. Tourism provides a major economic development opportunity for many countries and a means of improving the livelihoods of its residents. Both the public and private sectors involved in tourism depend on planning to achieve sustainable tourism development that respects the local community, creates appropriate employment, maintains the natural environment, and delivers a quality visitor experience. However, many tourism destinations have pursued development without proper planning and without considering the many impacts such development will bring to the community. While tourism does enable economic development, many authors are quick to point out that, unless properly managed, the costs of tourism can exceed its benefits (Elliot, 1997; PCE, 1997; Kearsley, 1997; Lim, 1991a; Simmons, 1988). Local government can play a significant part in supporting and encouraging sustainable tourism development. Local or community level- Tourism planning at the local level involves subregions, cities, towns, villages, resorts, rural areas and some tourist attractions. This level of planning may focus on tourism area plans, land use planning for resorts, and planning for other tourism facilities and attractions Tourism planning is important because it provides a common vision, direction and commitment for tourism which are the result of participation of many representatives. The process of tourism planning includes:

- Assessing the possible impacts of development and the resource problems which will be faced;
- Analyzing the competitive status of a destination and its ability to respond to changes in the travel market;
- Providing a level of stability and predictability in the progress of the overall development of tourism in a given area.

Destination planning involves a number of steps and activities that include designing, financing, developing, and marketing of a destination to attract the visitors. It requires cooperation and commitment of a number of different segments including government and community leaders, architects, engineers, investors, economists, environmentalists, and others to ensure the sustainability of a destination (Uni.Hawai TO 490, Tourism Destination Planning). Government's planning role is important to the success of tourism and resort development. Good planning requires that all levels of government are active in the management of a balanced growth approach.

Local Governance and Infrastructure

An important role of the public sector is to monitor tourism activities and development to secure a reliable source of information. This information can then be used to develop strategies and plans for sustainable tourism development. To have tourism development, although the lows and plans of development, local government must do concrete work as fast as they can in infrastructure improve. Tourists like the nature, environmental, landscape, and cultural heritage, but also they need some condition to go around in one area. To go in one place and to spend money, they want qualitative conditions. So, when we talk about the infrastructure, local government must do invest to improve the quality of all needed infrastructure

for tourists and tourism development like roads, water, electricity, waste management etc. investing in infrastructure is one important concrete way that local government can help local businesses in tourism services.

Local Government and Private Sector of Economy

The role of tourism on environmental and human development is necessarily ambiguous (Serdoura, Moreira & Almeida, 2009). Local authorities enable sustainable tourism development by encouraging and facilitating private sector investment in development activities via development plans and strategies, the annual planning process. The economic effects of tourism include changing work and consumption patterns, standards of living, and social roles and practices. For the private sector, financial risk and profitability are the primary concerns including the sources of capital for the planned project, extent of foreign ownership or control, wage rates for the local labor force, and availability of private sector funds for investment (www.tim.hawaii.edu/dl). So local government have support role for local economy giving them flexibility in taxes and financial aid. Also local government can give them information about news in agriculture, tourism services, ICT, other technologies, and encourage them to prove them. One important thing is that local government needs to take the balance in economic support and to help all the kind of businesses so the area will not have monoeconomy, because in tourism everything is interest for someone. And tourists go to visit one area if they have many kind services, with different costs for them.

Local Government and Education

Development Education is a necessity in the age of globalization and the knowledge society. Today's society asks a lot of us. The world has become smaller and yet more complex, we have access to more information than ever before and yet we are left with the feeling that we are drowning in information gasping for knowledge (idea: supporting and advancing development education). If we speak all the time for development, we can't have the development without education. Is needed to understand that when we talk for education, it means, that in education scheme, must includes all the actors. We need to work effectively with others in very challenging environments at work and in our private life and we need to be good communicators in and between different cultural settings both at home and abroad. Tourism cant development without education. So, encouraging tourism education is one of the things that local government can do. To have a qualified services in tourism for tourists need qualified personnel, well educated people in different field, like tourism marketing, economic tourism, communication, foreign language, etc. Local governance can plan different support schemes for all youth,

which study in tourism education, have good results, and turn back, in their birthplace. Learning is an integral part of the public policy process and consequently indicator of sustainable development.

Local Government and Promo Marketing

In the last decade the tourism industry has been marked by a strong internationalization of its markets with new competitors entering and old ones leaving on a day-to-day basis. This has forced actors of the tourist market to seek for global business strategies and to achieve effective cross-border integration, coordination and control of activities in order to generate a sustainable competitive advantage. Tourism needs a strong marketing and promo. Local government is one important actor to organize different events for promo marketing in tourism. Encourage proper use & appreciation of heritage sites & culture. "Event tourism" is an activity in which territorial authorities are becoming increasingly interested due to its potential to: stimulate the development of new facilities, to promote the host area, and the significant economic benefits it can bring to an area, such as increased employment (Fry, 1993; Kean, 1993).

There are many ways that local government can do this.

4. Methodology

The purpose of the article was realized as follows:

- Searching method: review the literature, connected to the role of government promoting and supporting sustainable tourism development. We have review in international literatures, many projects and studies for some places.
- Analyze methods: This review provided an understanding of local government's functions and responsibilities for tourism planning. We have analyzed different literature about the role of local government in tourism
- Questionnaires and Interviews with local government staff and different specialist: This was used to give us the information about the concept of sustainable tourism development that exists in the local government in Albania. To gain an understanding of current tourism plans and strategies, those are working the staff in local government. We have chosen 40 communes/municipalities to make interviews. The questionnaire had different questions which consist in tourism plan and sustainable development.
- Also past of the interviews in terrain was discusses with local habitants and business. During the *free conversation* they have told us about their goals for investments in tourism services and all the obstacles that exist. They have express

that they want from local government. Chosen the "free or no formal conversations" with them, had the aim to make them feel better and free during the conversation.

5. Analysis of Case Study: Tourism in Albania and Local Government

In Albania after 1990, along with significant changes occurring in the economy, political and social life, the local government was subjected to significant change based on the law that gives legal rights and access to local government. Based on the low, basis unit of local government are communes and municipalities. Commune represents an administrative-territorial unity and community residents. as rule in rural areas and in special cases in urban areas. Commune subdivisions called villages and cities in particular cases. Municipality represents an administrative-territorial unity and community residents mainly in urban areas and in special cases include the rural areas. Scope territorial and municipal name specified by law. Municipal subdivisions in urban areas called neighborhood. Region is the second level unit of local government. Region represents an administrative-territorial unity, composed of several municipalities municipalities with geographical, traditional, economic, social and common interests. Of the region boundaries coincide with the boundaries of communes and municipalities that comprise it. District center located in one of the municipalities involved. Territorial scope, name and district centers are defined by law. Subdivision of county is the district. Public management efficiency and effectiveness, has been a concern constant for all politicians and public administrators all levels of government for many decades in Western countries, but the recently with a reflection on the rise to states in developing, including Albania. Increasing public demand for more accountability and efficiency in managing public goods and performance of high quality services based on a fair cost-benefit has challenging traditional ways of governance aiming at tangible results in public management. Even the fact that Albania is later than some other places of region in tourism development there is a big progress in tourism numbering and their nationality. At the first years tourism was something unknown for investitors(what economic activity), for habitants (how can they profit economically) and specially for local governance (which is our role). With the passing of the years have changes many thing and now local government has a power role in local economy and local development. Many local governments in Albania like, Municipality of Vlora, Himara, Saranda, Lezha, Shkodra, Durresi, etc and Commune like Margegaj, Voskopoje, Lukove, Ksamil,etc have construct their strategy of development based on sustainable tourism development. Those local units have taken have taken measures to control the territory, and control of businesses or activities that take place within the administrative unit. Also, importance is given to the type of activity sequencing of areas in the municipality or municipalities. it consists in fact of assistance to tourism economies, which in particular should be environmentally friendly and in harmony with the landscape

6. Further Implication

This article will have an impact on all stakeholders' sustainable tourism development. Besides the presentation of ideas that will treat theoretical concepts, analysis of the present case study, the article will affect, in further recognition of being an incentive in local government that development plans include tourism as a powerful indicator of sustainable development. Through the fact of tourism development the local government can construct the theory and plans for sustainable development tourism in Albania. Also this article can serve as start for all them local governments that haven't include yet tourism in their development plan.

7. Recommendations

Tourism is one of the best sustainable economies. All the local government must take knowledge about the sustainable development. It is very important to know and to construct strategy and plans with view of sustainable development.

At first local government must know all the resources in their area, and give them an economic value. And then according to the lows and plan of development habitants can use them for local economies.

Tourism improves the life of local habitants and has a large contribute in social and economical development.

Only the transformation of traditional buildings into hotels proposed by the last Development Laws may be compatible with the aim of protection of the environment and attraction of alternative forms of tourism since such establishments target small numbers of low impact tourists. This mean that local governments have to become careful with constructs permissions.

To have sustainable development they need to take care for environmental. Unorganized and unlimited tourism may have heavy negative impacts on the future of tourism. So although the fact to take care about the environment they must have control on territory for the tourists and for the local bossiness that serve in tourism economy.

Promoting as much as they can for their community is another important way for sustainable tourism development. This has another impact in the local community because it encourages them to work more and more. Local foods, local fests,

traditional values, historical places are some of the alternatives that local government can promote.

Local government can give them information about news in agriculture, tourism services, ICT, other technologies, and encourage them to prove them

Monitoring performance is an ongoing process of collecting and analyzing data to compare the implementation of a project, program or policy compared with the expected results. Through monitoring, local government can control development plans, keep control over the territory, and preserve natural resources. Also monitoring during the realize time plan, can discover weak points of the plan and the possibility to intervene in them and f to improve or to subsidize interest actors.

8. Conclusions

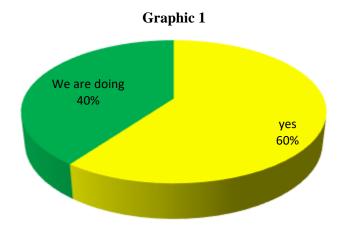
In the Albanian perspective, the EU integration process, sets requirements clear to all public sector in Albania, which in general can describe how requirements relating to issues of efficiency, transparency and accountability. Using a model based on results, within the EU integration is essential not only in the context of maximum utilization the pre-accession assistance, but also taking into account the whole process leading to EU membership and the need to improve capacity administrative and institutional capacities to absorb funds, manage the process and bring quality inputs for the EU today and in the future when we member. Chain results mean that, "Inputs are required to perform activities, in order to manufacture products that will lead to achieving Short-term results and / or term which consequently lead to the attainment long-term impact". Sustainable development requires that both levels of governments to maintain their responsibilities and collaborate on development. Local government is closer to the community, and recognizes the closer their problems and needs. Sustainable development now is part of our life, our education, but specially an obligation for governance's plans. Sustainable tourism has three interconnected aspects: environmental, socio-cultural, and economic. Tourism is an economic activity that if is well managed proceeding pursuant to the principles of sustainable development. Recent years in Albania is being paid great attention to Tourism development. From our past tourism was few development and was never seen as a economic profit. At first tourism was as important issues in development plans from central governance and now with the reforms in local governance, most local units have put tourism as a priority development. Economic evaluation of natural resource and referral possibilities for exploitation by development plans has begun to bring good opportunities for local development. Local government can have direct and indirect impact in sustainable tourism development. Yet local governments have no institutional role but simply a full function for the management of natural resources, by reducing the local economy in good profit opportunities for residents. Although it lacks the infrastructure, or in tourism management and marketing, activation of local governments to promote tourism and its support, has given results in many local units, bringing economic benefits to businesses, and same, adding deposits, in the coffers of the taxes, the municipality or commune. Also these help for employments in community, and growth the desire for education at youth people in tourism study.

Annex with questionnaires analysis

Questionnaires with staff of local governments in Albania

- 1. Have your municipality/commune make the strategy of development?
- Yes
- o No
- We are doing

Yes	We are doing
24	16



60% of administrative units have already drafted the development plan. 40% of them are working on the development plan. This shows that local governments are giving greater attention to development plans for communities from coming to the aid and improve socio-economic development. This is understood as an increase in the responsibility of local governments to precede road development. This is understood as an increase in the responsibility of local governments to precede road development.

2. Which is the main goal in the strategy?

(Without alternative, they can answers as they want)

Through development strategies or plans to reach that aim to socio - economic development to manage the area, meet the requirements of the community by providing them with employment opportunities, social services, and private enterprises for the exploitation of natural resources found in their place of residence. They aim to build an environmentally friendly economy, a strong local economy, and above all be sustainable

- 3. You are making a long term strategy?
- o Yes
- o No

yes	no
40	0

When we asked about the period of the strategy, all response that is a long term strategy. And this is enough response to understand that they have plan a secure future and they are planning sustainable development. As they say, strategic long-term planning benefits a small business by allowing it to be proactive in its growth, rather than by simply reacting to market conditions. Long-term strategy allows them to budget over a longer period for new initiatives. Trying to fund a new product line or division with cash on hand may not be possible. Budgeting a portion of their revenues or profits over a period of several years allows you to properly fund new initiatives without weakening your current operations or financial position.

4. Which is the relation of sustainable development with strategy/plan?

Today it is impossible to govern without sustainable development. The entire legal framework and development policies have imposed, that every step or development plans, to be long term. So, all the strategies have the purpose that all the communities develop in sustainable secure way. Through the strategy and plans they oriented and give recommendations to local habitants and local businesses to be secure in their investments and to construct a strong local economy.

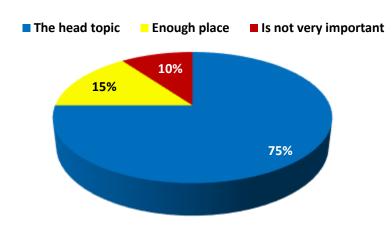
How much place takes tourism in your plan/strategy?

o Topic

The topic	head	Enough place	Is imp	not ortant	very
30		6	4		

- o Enough place
- Is not very important

Graphic 2



75% of local government's interviews had response that tourism is the head topic in the local development plan. Those are local units which have much time that in their territory has start tourism economy and they have profit from it, so they want now to go on in planning sustainable tourism development. But also are some communes in mountain areas that in last years has start to promote tourism development. This is connected with wonderful resources and the landscape that offers nature in their territory. Even the fact that they are new in tourism and without an organizing marketing, local habitants have profit enough from tourism development. 15% of local units have give tourism enough place in the strategy of developments. From a general point of view this are small municipalities or communes that has not much resources that can serve in tourism development. Only 10% had considered not important tourism in their plan of development. This can depend from geographical position, geophysical features, historical values etc.

5. Which is the relation between sustainable development and sustainable tourism development in strategy?

They are trying to collaborate with specialists in all areas, to integrate all elements of development, in a way, to have sustainability. By the fact that tourism is part of development strategies, the plan is built on the basis of sustainable tourism

development. Sustainable tourism has three interconnected aspects: environmental, socio-cultural, and economic. Sustainability implies permanence, so sustainable tourism includes optimum use of resources, including biological diversity; minimization of ecological, cultural and social impacts; and maximization of benefits for conservation and local communities. It also refers to the management structures that are needed to achieve this.

6. Which is the relation between local government and local business?

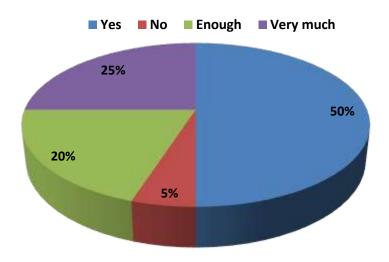
"Support them" this was the main answer from all the persons which have make the questionnaires. All the studies and plans have aims to support local developments which indirectly consist at construct and develop local economies. In all the municipality or commune before and during the time of making plan and strategies the staff and the legal represented of commune take meeting with local business and discusses to get information about their ideas, their problems.

7. You believe that tourism in future years will bring benefits for you community?

- o Yes
- o No
- Enough
- Very much

Yes No Enough Very much
20 2 8 10

Graphic 3



50% of local units think that tourism will bring many economical and social benefits if they go on to invest and to manage well tourism activity. 20% of them declare that they will profits from tourism activity. 5% of local units interviewed response that for their local government tourism will bring enough benefit. Only 5% do not believe in tourism economy. This can show that the main parts of local governances have start to construct road for tourism development.

9. References

Argyris, C. (1992). On organizational learning. Oxford: Blackwell.

Baeten, G. (2000). The tragedy of the highway: Empowerment, disempowerment and the politics of sustainability discourses and practices. *European Planning Studies*, 8, 69-86.

Bernstein, S. (2002). Liberal environmentalism and global environmental governance. *Global Environmental Politics*, 2(3), 1-16.

Bennett, C.J., & Howlett, M. (1992). The lessons of learning: Reconciling theories of policy learning and policy change. *Policy Sciences*, 25, 275-294.

Bramwell, B., & Lane, B. (1993). Sustainable tourism: An evolving global approach. *Journal of Sustainable Tourism*, 1, 1-5.

Butler, R.W. (1991). Tourism, environment and sustainable development. *Environmental Conservation*, 18, 201-209..

Daly, H.E. (2008). A steady-state economy. London: Sustainable Development Commission.

Demeritt, D. (2006). Science studies, climate change and the prospects for constructivist critique. *Economy and Society*, 35, 453-479.

Dovers, S. (1995). A framework for scaling and framing policy problems in sustainability. *Ecological Economics*, 12, 93-106.

Dovers, S. (1996). Sustainability: Demands on policy. Journal of Public Policy, 16, 303-318.

Dovers, S. (2005). *Environment and sustainability policy: Creation, implementation, evaluation*. Sydney: Federation Press.

Dovers, S.R., & Handmer, J.W. (1992). Uncertainty, sustainability and change. Global

Freeman, R. (2006). Learning in public policy. In M. Moran, M. Rein & R.E. Goodin (Eds.), *The Oxford handbook of public policy* (pp. 367-388). Oxford: Oxford University Press.

Hall, C.M., & Lew, A.A. (Eds.) (1998). Sustainable tourism. A geographical perspective. London: Addison Wesley Longman.

Hall, C.M., & Lew, A.A. (2009). Understanding and managing tourism impacts: An integrated approach. London: Routledge.

Kerr W. (2003). Tourism public policy and the strategic management of failure. Amsterdam: Pergamon.

Klein, R. (1997). Learning from others: Shall the last be the first? *Journal of Health Politics, Policy and Law*, 22, 1267-1278.

Kooiman, J. (2003). Governing as governance. London: Sage.

Lee, D.S., Fahey, D.W., Forster, P.M., Newton, P.J., Wit, R.C.N., Lim, L.L., Owen, B., & Sausen, R. (2009). Aviation and global climate change in the 21st century. *Atmospheric Environment*, 43, 3520-3537.

Meppem, T., & Gill, R. (1998). Planning for sustainability as a learning concept. *Ecological Economics*, 26, 121-137.

Michael, E. & Plowman, G. (2002). Mount Stirling: The politics of process failure. *Journal of Sustainable Tourism*, 10, 154-169.

Mills, J.H., & Waite, T.A. (2009). Economic prosperity, biodiversity conservation, and the environmental Kuznets curve. *Ecological Economics*, 68, 2087-2095.

Mowforth, M., & Munt, I. (1998). *Tourism and Sustainability: Development and new tourism in the Third World*. London: Routledge.

Mozumder, P., Berrens, R.P., & Bohara, A.K. (2006). Is there an environmental Kuznets curve for the risk of biodiversity loss? *The Journal of Developing Areas*, 39(2), 175-190.

Mycoo, M. (2006). Sustainable tourism using regulations, market mechanisms and green certification: A case study of Barbados. *Journal of Sustainable Tourism*, 14, 489-511.

Nilsson, M. (2005). Learning, frames, and environmental policy integration: the case of Swedish

Pemberton, H. (2000). Policy networks and policy learning. UK economic policy in the 1960s and 1970s. *Public Administration*, 78, 771-792.

Pemberton, H. (2003). Learning, governance and economic policy. *British Journal of Politics and International Relations*, 5, 500-524.

Pierre, J., & Peters, G.B. (2000). Governance, politics and the state. London: Palgrave Macmillan.

PricewaterhouseCoopers (2007). The automotive industry and climate change: Framework and dynamics of the CO2 (r)evolution. Stuttgart: PricewaterhouseCoopers AG.

Sustainable Development Commission (2010). SDC responds to Defra funding decision, 22 July 2010. Available at http://www.sd-commission.org.uk/news.php?id=365.

Swarbrooke, J. (1999). Sustinable tourism management. Wallingford: CABI.

Treuren, G., & Lane, D. (2003). The tourism planning process in the context of organized interests, industry structure, state capacity, accumulation and sustainability. *Current Issues in Tourism*, 6(1), 1-22.

TUI Travel PLC (2010). Group Sustainable Development Policy. Available at http://www.tuitravelplc.com/tui/pages/sustainabledevelopment/strategysd/policy

United Nations Environmental Programme (2005a). *Marketing sustainable tourism products*. Paris: United Nations Environment Programme and Regione Toscana.

United Nations Environmental Programme (2005b). *Integrating Sustainability into Business: An Implementation Guide for Responsible Tourism Coordinators*. Paris: United Nations Environment Programme.

United Nations Environmental Programme (2005c). *Integrating Sustainability into Business: Management Guide for Responsible Tourism Coordinators*. Paris: United Nations Environment Programme.

United Nations Environmental Programme (2007). Global environment outlook (GEO-4): Environment for development. Paris: United Nations Environmental Programme.

United Nations Environmental Programme (2009). Sustainable coastal tourism. An integrated planning and management approach. Paris: United Nations Environmental Programme.

United Nations World Tourism Organization (UNWTO) (2007a). Tourism will contribute to solutions for global climate change and poverty challenges, Press release, UNWTO Press and Communications Department, March 8, Berlin/Madrid.

United Nations World Tourism Organization (2010). Sustainable Development of Tourism, Mission Statement. Available at http://www.world-tourism.org/sdt/mission/en/mission.php

United Nations World Tourism Organization, United Nations Environmental Programme, & World Meteorological Organization (2008). *Climate change and tourism: Responding to global challenges*. Madrid: United Nations World Tourism Organization, United Nations Environmental Programme, World Meteorological Organization.

Weaver, D.B. (2006). Sustainable tourism: Theory and practice. Oxford: Butterworth-Heinemann.

Wheeller, B. (1993). Sustaining the ego. Journal of Sustainable Tourism, 1, 121-129.

Wheeler, S.M. (2002). Constructing sustainable development/safeguarding our common future: Rethinking sustainable development. *Journal of the American Planning Association*, 68(1), 110-111.

World Commission for Environment and Development (WCED) (1987). *Our Common Future. The Brundtland Report*. Oxford: Oxford University Press.

World Economic Forum (2009a). Towards a low carbon travel & tourism sector. Davos: World Economic Forum.

World Travel and Tourism Council (WTTC) (2009). *Leading the challenge on climate change*. London: World Travel and Tourism Council.

Financial. Public Economics

Fiscal Policy in the European Union – Present and Perspectives

Eugenia-Ramona Mara¹

Abstract: This article analyzes the main trends of fiscal policy in the European Union, following the economic crisis impact and fiscal policy measures that were applied in this economic context. The study is focused in a few key areas: the evolution of fiscal policy captured by indicators measuring tax burden, public sector size analysis by quantifying public expenditure share in GDP and the evolution of budget deficits. Finally, the study watched correlations between fiscal policy and macroeconomic developments, identifying trends and anticipating possible solutions of fiscal policy to achieve the required coordinates of fiscal governance in the European Union. For realizing this study we use annual data from Eurostat Database for 2000-2010 for EU countries. The major findings of the study are the negative impact of the size of public sector on economic growth for EU and also for Romania and the increase of the tax revenue if the economic growth rates increase.

Keywords: fiscal policy; economic growth; budget deficit;

JEL Classification: E62; H3; H61

1. Introduction

In this article we try to realize an analysis of fiscal policy at European Union level through the most relevant indicators: the tax burden, public sector size and budget deficit. We followed the evolution of these indicators since 2000 for revealing the government fiscal policy outcomes in the European Union countries. Also the impact of economic crisis is analyzed considering the major changes determined by the economic crises on fiscal policy in many countries, like VAT increase with important consequences on the public budget and on the households revenues. The economic crises brought huge budget deficits and the needs of financing this deficit through the public indebtedness.

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The objective of this paper is to realize an analysis of fiscal policy evolution for revealing the causes of actual budget deficit and to express possible solutions for the fiscal discipline required by the European Union.

Recently was adopted by twenty-five European leaders the Treaty on Stability, Coordination and Governance aimed at strengthening fiscal discipline. The most important elements of this Treaty include a requirement for national budgets to be in balance or in surplus, a criterion that would be met if the annual structural government deficit does not exceed 0.5% of GDP at market prices. According to European Commission this balanced budget rule must be incorporated into the member states' national legal systems, preferably at constitutional level, within one year after the entry into force of the treaty. In the event of deviation from this rule, an automatic correction mechanism will be triggered.

Previously many studies identifies the state of public finance in EU countries and try to find the impact of the fiscal policy on economic growth, but without considering this new requirement for the budget deficit. We try to consider this new threshold of the budget deficit for the future trend of the fiscal policy in EU countries.

This study is based on a descriptive analysis of figures and indicators provided by Eurostat Database and also build an econometric correlation between some variables through regression equations.

Realizing this correlation we have some important results: the increase of public sector has a negative impact on economic growth and also a huge deficit is specific for a recession period. The actual fiscal policy promoted by EU countries results in huge deficits and is based on indebtedness. What are the solutions in this context for realizing the structural deficit which does not exceed 0.5%?

For all EU countries even if there are part of euro zone or not the solution is decreasing the public sector reducing the public expenditures and to have in the near future an efficient public sector. There are reduced possibilities to increase tax revenues because we have some factors like unemployment which doesn't have a favorable effect on tax receipts. Also even if many EU countries increase the VAT, there are important decreases of labor force taxation and corporate tax. Other countries like Romania have important deficits of the Social Security Budget.

According to European Commission estimations, the value of the fiscal stimulus package adopted by the Euro Area reaches 2% of GDP (1.1 % in 2009, 0.8% in 2010). For 2009, the most consistent "fiscal package" was adopted by Spain (2.3% of GDP), Austria, Finland, and Malta (over 1.5% of GDP). Greece and Italy did not adopt the discretionary policy in order to avoid the increase of the governmental deficits (Sabau-Popa & al., 2011).

Fiscal policy is a component of economic policy representing financial support to implement other policies. Fiscal policy involves the use of public spending, taxation and borrowing to influence both production and economic activity and employment. It is important to note that some changes in fiscal policy affect both the demand and aggregate supply. Fiscal policy has traditionally been seen as a demand management tool. This means that changes in public expenditure, direct and indirect taxation and the budget balance can be used to influence economic growth. Keynesian School sustain that fiscal policy can have powerful effects on aggregate demand, output and employment, if it is used when economic needs require such action.

Monetarists economist on the other hand, consider that government spending and tax changes can only have a temporary effect on aggregate demand, output and creating new jobs and that monetary policy is a more effective way. Expansionary fiscal policies can be applied when economic performance and economic growth are in decline, for helping the recovery of economy. In these cases governments may apply measures to increase public spending, accompanied by reduction of compulsory levies in order to stimulate aggregate demand and influence private consumption and investment.

Contractionary fiscal policies target is reducing aggregate demand during the boom, when is recording a too rapid growth of production and signs of overheating. Regulator is based on the expected impact that reducing aggregate demand through a policy of reducing income available for private investment and consumption, by increasing tax levies on the public budget, while public spending cuts, will result in a reduction in production and supply counteracting trends overheating.

Concerning the area of fiscal policy, a government art is not to exceed the psychological line of demarcation between the tax burden that taxpayers can support and maintain equity between different social groups (Cliche, 2009).

2. Review of Literature

An important study concerning the effects of fiscal policy in euro area and US is realized by Burriel at al. (2009). This study continues past literature, analyzing the effects of fiscal policies in euro area viewed as a whole in this respect, taking into account a database of fiscal variables with quarterly values between the 1981 - 2007.

Following the same line with previous analyzes, it was found that GDP and inflation increased in response to government spending shocks, despite the fact that GDP multipliers are generally very similar in both cases, and a small volume. However, it was shown that the multipliers of GDP are rising steadily since 2000,

both in the Eurozone and the US, which may link with the "superabundance of global economies."

On the other hand, government spending shocks have a higher level of persistence in the U.S., which can be due to a huge amount of military spending. The impact on private investment is not so homogeneous: if the government spending or net taxes are higher there is a negative impact in the US, whereas in the EMU only tax increases seem to lead to a negative reaction of private investment.

Myles (2007) try to highlight the role of taxation in particular on economic growth based on econometric models. This study was an econometric modeling of economic growth rate, using various calculation models, to highlight the variables that influence economic growth. There is no empirical evidence that aggregate data rate of growth would be in some way related to the tax. But there is evidence that growth rate is higher when corporate taxes are lower. Any increase of the personal income tax will affect the growth rate by influencing the decision to choose entrepreneurship.

Karras et al. (2009), realizes an analysis for 19 European states estimating the effects of taxation change on increase of real GDP, based on annual data 1965 - 2003. The empirical results show that an increase in taxes has a negative and persistent effect on GDP per capita. Effect size is determined by "tax shock", and it is estimated that a tax receipt share in GDP increase of 1% will lead to a decrease in real GDP by 0.5% to 1.2%. This estimate is lower than that of Romer and Romer (2007), the estimated effect of 3%, but "fiscal shock" presented by them was very different from here, they account for aggregate GDP rather than per capita. Following this study has shown that an increase in taxes has a clear negative impact on aggregate GDP, consumption and investment. The tax change on investment is more pronounced than for the other two indicators.

Afonso et al. (2009) try to identify the macroeconomic effects of fiscal policy using a Bayesian Structural Vector Autoregression approach for US, UK, Germany and Italy. They found that government spending shocks, in general, have a small effect on GDP. The results of this study reveals that the government spending shocks have, in general, a small effect on GDP.

The impact of public expenditures and taxation on economic growth is also debated by Gerson (1998). Government expenditures on health, education, and infrastructure should have a positive impact on growth on long term view as productive expenditures. On the other hand, the taxation impact is net identified.

According to Lee et al. (2005) higher corporate tax rate have a negative impact on economic growth, while the personal tax rate have an unclear impact. If the corporate tax rate is reduced with 10 percentage points the economic growth will increase with 2 percentage points.

3. Methodology

The government use taxation for various purposes: first of all for financing the public expenditures, or for assuring a degree of redistribution of incomes through (progressive income taxation). Also, the stability of economy and the resource allocation can be realized using taxation. Negative externalities can be solved using as a main tool some taxes.

Even if taxation can't be neutral, at the same time, taxes should not be distortive for economic growth. In this context we try to emphasize the impact of fiscal policy on economic growth in EU, more specific the correlation between the effects of fiscal policy and the economic growth rate. In the European Union the state intervention is quite powerful and it is sustained through a high level of taxation. The tax harmonization was the major trends of EU fiscal policy, but after the crisis we have a new trend –fiscal consolidation for reducing the level of public deficit and public debt. Fiscal policy is very important for the economic growth, because many taxes have a distortionary impact. If the rates are increase or decreased we have some transmissions channels of this fiscal policy measures in the economy. If the government intend to stimulate the investment has to decrease corporate tax rate. For the public budget this means a decrease of tax receipt, but only on the short term, because on the long term any increase of investments means new jobs, new incomes for household, increase of the consumption and finally an increase of economic growth. And we have an increase of the tax receipts for the budget.

In the next figure we try to reflect the transmission channels of fiscal policy. The changes of tax rates are used as leverage to stimulate the economic growth. If the evolution of GDP is positive it is expected an increase of tax receipts for the public budget. In this context the government can decide to spent more.

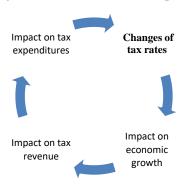


Figure 1.

Global indicator which reflects the fiscal policy is the tax burden measured through total tax receipt as percentage in GDP. This ratio is relevant from macroeconomic perspective because reveals the government success in collecting taxes and also the perception of tax burden for contributors. There is a huge difference between the average for EU and Romania concerning the level of this indicator, more than 10 percentage points. At first site we can say that in Romania the level of tax burden is the lowest comparative with EU countries, but in fact we have a higher tax burden.

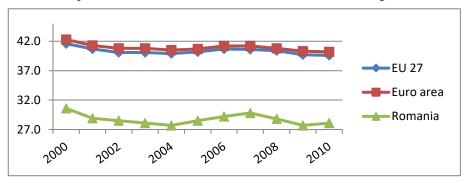


Figure 2. Fiscal burden in EU and Romania as % in GDP

Source: Own calculations based on Eurostat Database

The explanation is because the collecting tax receipt is very low we have only apparently a low tax burden. Also, the tax evasion is very high and the underground economy hides the potential tax receipts. More than that, the physical person must support a higher tax burden comparative with companies.

In Romania the consumption and labor are highly imposed comparative with capital. Increasing the VAT rate was a necessary measure for reducing the budget deficit, but for the consumers the impact was a huge decrease of the purchasing power. More than that the VAT rate increase from 19% to 25% leads to inflation increase. (Mara et al, 2011)

The majority of EU countries choose to increase VAT for reducing the budget deficit in 2009 and 2010. But this measure is not enough because the level of public expenditures continues to be very high as we can see in the next figure. The largest gap was in 2009 and only after this year the level of public expenditures start to decrease.

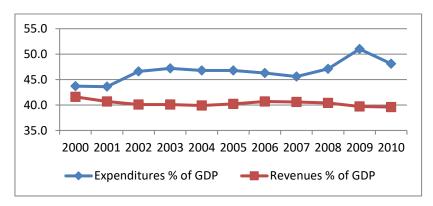


Figure 3. The evolution of public expenditures and revenues

Source: own calculations based on Eurostat Database

The size of the public sector can be expressed by the level of public expenditures. In the last few years the public sector increases, especially in 2008 and 2009. The most important increase is registered for the social protection; for instance in 2007 is 17.6% from GDP and goes to 20% GDP. Another important category of public expenditures is health and also we have an increase from 6.7% in 2007 to 7.5% from GDP, according to data provided by Eurostat Database.

We will continue our approach by presenting the evolution of public sector in the EU and Romania measured using the share of public spending in GDP. For the EU there is a general trend roughly constant until 2007, and then we have a strong growth determined by the economic crisis began. In Romania the situation is much different from the EU, as public spending starts increasing since 2005. To note that after 2009 the trend is declining in both the EU and Romania.

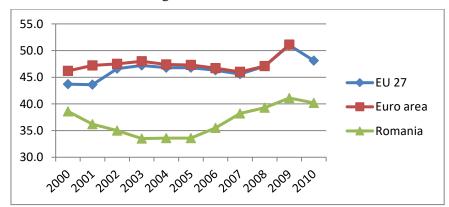


Figure 4. The size of public sector (Total general government expenditure as % in GDP)

Source: own calculations based on Eurostat Database

The results of the fiscal policy are reflected in the budget deficit evolution. Because in Romania have an uncontrolled growth in public spending since 2005, the repercussions are reflected in the continuous increase of the budget deficit, which in 2009 reached a record level of 9% of GDP, exceeding the EU average of 6%. The year 2010 is marked by a strong deficit reduction both in EU and Romania and we have similar data almost 6%.

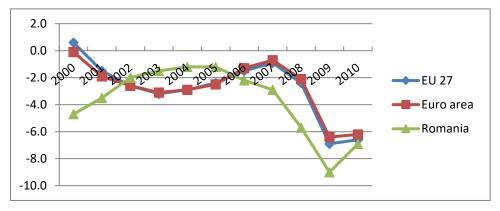


Figure 5. Net lending (+)/Net borrowing (-) under the EDP (Excessive Deficit Procedure) Percentage of GDP

Source: own calculations based on Eurostat Database

This budget deficit decrease continued in 2011 in Romania although we have no available data in this graph, due to austerity fiscal policies applied by reducing public expenditure and increase of taxes: VAT, excises, taxes on property or introducing new taxes and also due to economic growth registered.

4. Results

In this section our study tries to identify macroeconomic correlation between fiscal policy and economic growth rate. For EU, we consider the average for all 27 countries. Also we test these correlations for Romania for the same period of time.

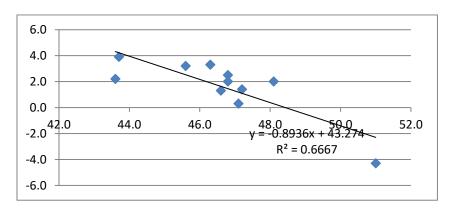


Figure 6. Correlation between the size of public sector and economic growth rate for EU (2000-2010)

Source: own calculations based on Eurostat Database

In this case there is an indirect correlation between the size of the public sector and the economic growth rate, if the public expenditures are increased with 1%, the result is a decrease for economic growth rate with 0.89%. The link between the two variables is quite strong, revealed by correlation coefficient of 66%. Based on the graph we can write the regression equation:

EGR=-0.893PS+43.27

where:

EGR = economic growth rate

PS =the size of public sector expressed through the share of public expenditures in GDP

For Romania for the same time we find an indirect correlation but not so powerful like for EU, only in proportion of 43%.

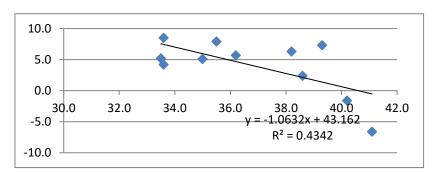


Figure 7. Correlation between the size of public sector and economic growth rate for Romania (2000-2010)

Source: own calculations based on Eurostat Database

The tax burden is another important macroeconomic indicator which reflects the results of the tax policy. Some tax reductions are used for stimulating the economic growth, but for the budget these tax cut mean less tax receipt. This decrease of tax receipts is only on the short term because on the long term when economy is growing there are many revenues encashed for the budget.

So, the expected result is an increase of tax revenue when there is an economic boom. This hypothesis is confirmed by the next figure, thus we have a direct correlation between tax revenue and economic growth rate. These variables are correlated in a proportion of 33% for the analyzed data in European Union.

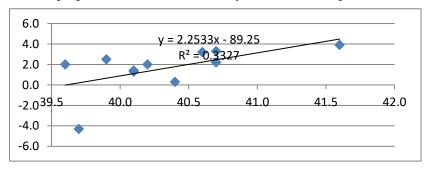


Figure 8. Correlation between the tax burden and economic growth rate for EU (2000-2010)

Source: own calculations based on Eurostat Database

As an exception for Romania are not the same results like for EU. In this case we don't have a linear correlation, we can find only a polinomyal regression of second degree. The correlation is indirect and quite weak comparative with EU correlation. This means that even before 2008 in Romania was registered economic growth, the

level of revenue collection for the budget was very low because of tax evasion and underground economy.

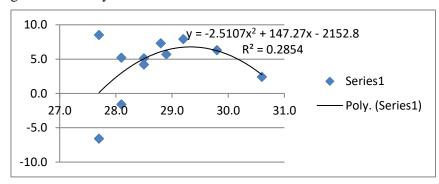


Figure 9. Correlation between the tax burden and economic growth rate for Romania (2000-2010)

Source: own calculations based on Eurostat Database

The economic crisis impact on the budget deficit had an unexpected magnitude for all EU countries. For avoiding this magnitude in the future, recently the 25 EU countries signed the Treaty on Stability, Coordination and Governance aimed at strengthening fiscal discipline and introducing stricter surveillance within the euro area, in particular by assuring the balance of the budget. According to European Commissions the key elements of this fiscal agreement include a requirement for national budgets to be in balance or in surplus, a criterion that would be met if the annual structural government deficit does not exceed 0.5% of GDP at market prices.

In the next figure we try to reveal the indirect correlation between economic growth and budget deficit because the budget deficit is counted with the sign "minus" and these variables are correlated of 52%.

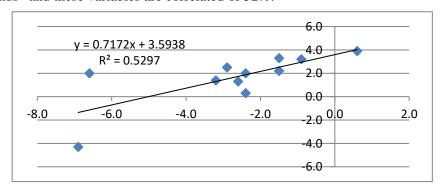


Figure 10. Correlation of budget deficit and economic growth rate for EU (2000-2010)

Source: Own calculations based on Eurostat Database

The similar results are registered for Romania, but with a powerful correlation, almost 65%. This means that as we see from descriptive statics starting with the economic crises our budget deficit increase more than the EU average.

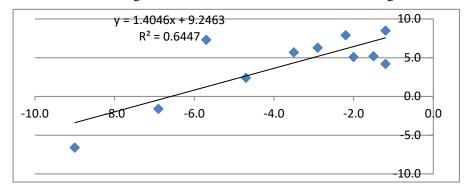


Figure 11. Correlation of budget deficit and economic growth rate for Romania (2000-2010)

Source: Own calculations based on Eurostat Database

For Romania this huge budget deficit from the time crises determined an increase of the public debt as percentage from GDP from 12.8 in 2007 to 34% in 2011.

5. Conclusion

The main conclusion of this study is the fact that in economic crisis times the fiscal policy has to be well managed because otherwise the budget deficit can became overwhelming and the risk of increase the public debt can't be avoided. Is strongly recommended for the governments to use some fiscal measures for stimulating the economy and approve increases only for productive public expenditures. In this category of productive expenditures we consider the most important the infrastructures expenditures. Other proper measures it will be increases of tax rate only for non-distortionary taxes and decreasing the public expenditures or if this is not possible to have a more efficient public sector.

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7. References

Afonso, A. & Sousa, R. M. (2009). The macroeconomic effects of fiscal policy. *ECB Working Paper Series No. 991*, January. Retrieved from http://www.ecb.int/pub/pdf/scpwps/ecbwp991.pdf.

Burriel, P., de Castro, F., Garrote, D., Gordo, E., Paredes, J., and J. Perez. (2009). Fiscal policy shocks in the euro area and the US: an empirical assessment. *ECB Working Paper Series*, October. Retrieved from http://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1133.pdf.

Gerson, P. (1998). The Impact of Fiscal Policy Variables on Output Growth. International Monetary Fund. *Working Paper*, 98/1. Retrieved from http://www.imf.org/external/pubs/ft/wp/wp9801.pdf.

Karras, G. & Furceri, D. (2009). Taxes and Growth in Europe. South-Eastern Europe Journal of Economics 2 (2009), 181-204.

Lee, Y. & Gordon, R.H. (2005). Tax structure and economic growth. *Journal of Public Economics*, 89, 1027 – 1043.

Mara, E.R. & Dezsi, E. (2011). Fiscal Policy Impact on Inflation Volatility in Romania in The Economic Crisis Context. *Finante - provocarile viitorului/Finance - Challenges of the Future*. University of Craiova, Faculty of Economics and Business Administration, vol. 1(13), December, pages 181-187.

Myles, G.D. (2007). *Economic Growth and the Role of Taxation, Fiscal Studies* vol. 21, no. 1, pp. 141–168.

Romer, C., & Romer, D.H. (2007). The macroeconomic effects of tax changes: estimates based on a new measure of fiscal shocks. *NBER Working Paper Series* No. 13264. Retrieved from http://www.nber.org/papers/w13264

Sabau-Popa, C. D., Kulcsar E. (2011). The effect of fiscal rules on public finance sustainability in the Euro Area. *Revista Economica/Economic Journal*, No. 6 (59) Part II/2011, p.p. 190-199, Retrieved from http://economice.ulbsibiu.ro/revista.economica/archive/RE%206-59.002-2011.pdf.

Cliche, P. (2009). Gestion budgetaire et depenses publiques: description comparée des processus, évolutions et enjeux budgétaires du Québec/Budgeting and Public Expenditure: comparative description of the process, budget issues and developments in Quebec. Quebec: Presses de l'Universite du Quebec.

Eurostat Database (2012). http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/themes.

European Comission (2012). Treaty on Stability, Coordination and Governance in the Economic and Monetary Union (TSCG). Retrieved from http://european-council.europa.eu/eurozone-governance/treaty-on-stability.

Miscellaneous

Intellectual Property Rights in the Era of "Information Society"

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Abstract. The phenomenon of breaching the intellectual rights is one of a big interest in these days. The computers and the development of software, also the explosion of Internet throughout the World give the posibility of an easy breach of the author rights. We analyse in the paper some situations which are many of them at the limit of the law, but present every day in our life.

Keywords: intellectual; property; plagiarism

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1 Introduction

The concept of property refers to any natural or intangible entity which is held by a person or a group of people and which can be consumed, sold, leased, transferred, destroyed etc. If on the nature of the physical property, there is not too much discussion and controversy, over the intellectual it seems that a consensus is hard to achieve. Intellectual property is specific to the human mind creation, having as their main fields: literary, musical, artistic, scientific.

A discussion on intellectual property, but not only, is inextricably linked to the legal aspects or sometimes only the moral of the infringement. Below, we give some examples of issues opened on this type of property. A person from an undeveloped country uses a pirated software for his perfection in the computer education. This person is in a day engaging by a company that produced one of the pirated software or, worse, a competing firm to ensure the safety of its data. If the individual concerned confesses in a good day the fault, what will happen? If the

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firm pirated will dismiss, then it will lose a good specialist which gives greater protection of the data. Otherwise, the firm will skip that episode way, for the purpose of her well-being, supporting also the Act of theft as a factor of progress! On the other hand, which will be the security firm that the specialist concerned will not betray on a good day, having already wont intellectual theft, competing for one?

The same situation, even if at first glance seems least different, is that of the hackers. How far it can go with the punishment of an individual who breaks security systems? Employment are known cases of such persons injured just from companies in order to prevent future such acts.

To what extent will be considered a hacker as a person who commits acts reprobabile and to what degree a factor of progress which provide a data security enhancement (we refer specifically to those who bear witness to the deed as being accomplished right act of bravado)?

Another problem, somewhat related to the previous, is that relating to the unlawful use of software products obtained in order to resolve some issues, high topicality. The problem is almost identical to that of the use of untested medicinal products or unapproved of bodies competent, but that solves medical problems of the patients completely. The question is: the results of scientific research alleviating part of the default user piratical? Also, in the case of a device based on a theft technology, but which is higher than the original, how will quantify the loss recorded by the first? Who can determine the exact benefits that would have been obtained by the original if you would not have occurred at higher technological?

2 The Scientific Research

Relative to the scientific research we could bring into question the problem of rediscovery or discovery in parallel of the results. In terms of scientific explosion, any researcher, regardless of how vast are the knowledge in the field, is practically unable to know all the specific scope of its concerns. Any respectable published scientific journal or as a footnote on the first page or at the end of the article the date on which it has received it for publication. In the time elapsed from receipt until the actual publication may be leaking a time a few months or sometimes even a few years. What happens to an article that deals with exactly the same problem that occurs in a shorter time to a magazine more timely in publishing? In principle, the second article will not have the right to paternity on the idea, but if it begins to be quoted in other works, until the emergence of the originally taught, will remain in the memory of specialists and so will assume a great deal of glory.

The problem is not new and has happened countless times in mathematics. Problem discovery, for example, the method for solving algebraic equation of degree III is

one very controversial. Thus, it appears that the true author is Scipione del Ferro which was very carefully to provide and publish the results, but talking to his friends ones closer. At a time, however, the method has been rediscovering by Nicolo Tartaglia. Girolamo Cardano, much more widely known and influential, being at a time and rector of the University of Padua, ask him to reveal the Tartaglia secret settlement of the equation. It requires the oath not to divulge it to anyone, and if he wishes to do so, however, to wait for the publication of the resolution by Tartaglia. The problem gets really complicated when Cardano learns that his and del Ferro previous resolution and shall be deemed, by oath made his Tartaglia and publish the results in the "Ars Magna" in the year 1545. At present, any beginner in the beauty of mathematics known formulas for solving the equation of degree III are called Cardano's formulas. Here's a problem very tangled copyright!

Also, it is appropriate that the conflict between Newton and Leibniz about the discovery of the calculation of the mathematical analysis, the soldier with the allegations of plagiarism made by Newton and preached up to debate the issue by the Royal Society of Sciences. Regardless of the verdict given by latter (in favor of Newton), today the two are considered the fathers of the theory.

Another aspect that we'll take in question is one which is very current and of the completion of scientific articles. A very large number of scientific communication is based on citing more or less complex of authors, with the "works" in which, often, the footnotes are more extensive than the content itself. According to the present, the authors do not violate the copyright, quoting the source correctly but, on the other hand, the job can easily turn into a collage of ideas taken. In this case, it is obvious that, over the legal regulations, it is in game the author's prestige.

A problem that occurs quite often in case of infringement of intellectual property rights is those of subconscious. Consider the case of a stolen scientific creations in a way or another and then distributed free, from another author of course to the general public. At the time the information is in turn used by a third person who trust the source of the second, no one can blame the breach of intellectual property rights, although it was committed.

3 Other Aspects of the Rights of Property

In the cultural field, the issue of intellectual property rights is something more complicated. By the provisions of law No. 8/14 March 1996 and subsequent additions, not specified in any paragraph of the quantity of information which is not allowed to coincide with the original. As part of a musical work, how many note may appear in a sequence so as not to be considered a plagiarism? In the analysis of a graphic works like a form of book cover within a collection, you can talk about the violation of intellectual property rights? If another author used the

same font size or the same layout on the page, or one or more lines drawn on a cover page, when it start the intellectual property to declare its presence? Also, in the framework of a literary or scientific, even one from image sequence of words begin plagiarism?

A final issue raised at the level of example is that of certain products which do not allow a diversification. To consider, by way of illustration, the industry of clothing or footwear. Is well-known the case of counterfeiting market profile. Violation of rights appears when using fake business name of the original, so you can benefit from its market share resulting from publicity campaigns or a high quality of its products, which have entered into purchasers' awareness. What happens when a company launches a coat or footwear absolutely identical to the one promoted by another?

In principle, it could be considered a violation of copyright, but on the other hand, the variety of combinations possible make it impossible to prescribe them.

From these examples, we come to the conclusion that in many situations, the analysis of breach of the limit of the right of intellectual property rights has a subjective side. Legal aspects of the problem are sometimes so complicated that the author of law may withdraw voluntarily from obtaining compensation. Consider, for example, the case where a small company makes a fake following which obtain a series of advantages materials, sufficiently large for it, but small for the original company. It is possible that all the costs to exceed the estimated amount of damage (even if they can recover), adding also the natural and effective recovery so that the holder of the patent to the company no longer appreciate as cost-effective operation in justice of the plagiarist.

The occurrence and then development of the Internet has brought with itself and its negative effects. In addition to the huge quantity of database of information available now to all inhabitants of the civilized regions of the planet, has occurred also the ability to post anything, anywhere and anytime on the Internet.

The emergence of the blog phenomenon has generated many "specialists" in all areas possible. We can meet today's "great home journalists", big "scientists" presenting and sometimes solve the problems that they don't even understand, "culture people" who get to write more than they have ever read.

It is obvious though, that in addition to these false values, there are veritable professionals, whose productions completed knowledges or satisfy the spirit.

The problem is that of educating the young generations in the direction of the filter to the existing information.

In addition to this negative aspect, but appears that of the host sites for pirated products, producing billions of dollars damage to the holders of the right. Thus, a

genre site: http://www.scribd.com/ hosts tens of thousands of works uploaded by anyone who wishes to make available to the general public intellectual product of another, of course...

Sites like http://thepiratebay.org/ or http://www.warez.com/ are supplying software products without license, but also dozens or maybe hundreds of thousands of books, movies, songs – absolutely all without the agreement of the owners.

As regards education, the phenomenon is becoming increasingly worrying, becoming the right a plague for the entire planet. Sites that host tens of thousands of essays, works for a licence or master degree, whole books of some teachers, constitutes a source of unlimited "creative inspiration" for pupils and students from around the world.

In Romania: http://www.referat.ro/, http://www.e-referate.ro/, http://referat.clopotel.ro/, http://referate.educativ.ro/, http://www.e-referate.ro/, http://www.referatele.com/, http://facultate.regielive.ro/referate.html, http://referate.acasa.ro/, http://www.preferatele.com/ (addresses obtained from a simple type the word "referat" on Google search engine) are examples of it all, in which, for example on the "preferate", a few young men with much enthusiasm sit tilt over a laptop and search for one of those 16000! of essays present (from ad present on the main page).

What is worse is the fact that everything there appears what statistics shows a number of over 137 thousand registered users at about 2 million young people (except those in pre-school education or secondary). To be noted that this situation derives from the analysis of a single site only! The phenomenon of plagiarism has become one generally. What is more serious, however, is the fact that the information posted is absolutely no verified, pupils and students having absolute confidence in their peers, which in turn have copied from who knows where and so on.

The situation may be at first glance dispensed by the use of screening programmes, such as plagiarism "Ephorus". Limits for sources of information are quite low however, from our experience there are situations where Ephorus gave the verdict of authenticity and a smart search on Google priveded the plagiarism in full.

It seems that only the creation of new systems of review could lead to a reduction of this phenomenon. Electronic teaching platforms or shared documents for the Working Group could be the solution, but the discussion of their effectiveness is open, especially at school or university level.

Until the development of conscience of potential users of information, we appreciate that they will be very difficult to overcome the phenomena of piracy, plagiarism, or any other type of infringement of intellectual property, without, however, each individual's privacy.

The Human resourcefulness, current technological capabilities (computers becoming faster speeds increasingly higher transmission in the network or media storage capacity, what seemed a thing of the SciFi now several years – to remind ourselves of his famous phrase of Bill Gates from 1981: "640 Kb should be enough for anybody"), the inbred temptations to obtain a result as quickly as are beneficial for society, but also bring with them, the possibility of circumvention of the elementary principles of intellectual property.

The activity of intellectual theft prevention is not feasible today than on the substance of the infringement of the right to privacy (see the possibility to investigate the contents of the e-mails on the backdrop of so-called fight against terrorism) or limiting the right of the buyer to benefit from unlimited product purchased by the methods of granting licences for a specific configuration of computing. Neither one, nor the other method does not fall too easily in human rights, but the complexity of life today push each of the parties beyond acceptable limits of freedom.

4 Conclusions

The question about copyright is very complicated and controversial. Despite the legal regulations, the imagination of the "authors" is particularly rich, avoiding barriers and building false careers. We estimate that, currently, the copyright infringement detection is particularly difficult because it requires the existence of huge databases with accurate translations of documents in various international languages, and making great software with fast search algorithms for the purpose. Without very severe punitive measures (especially in the higher research) can not eradicate the phenomenon of plagiarism or the summary of some real scientific work.

5 References

McFarland M.C. (1999). *Intellectual Property, Information and the Common Good*. Intell. Prop. & Tech. F. 060503.

Repanovici A., Cristea L. (2010). Proprietatea intelectuală și accesul deschis la informația științifică/ Intellectual property and open access to scientific information. *Buletinul AGIR/ AGIR Bulletin*, no. 1/2010, pp. 56-59.

Official Monitor no. 60/26 March 1996, Law no 8/41 March 1996 on Copyright and Related Rights.