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A Study of Job Satisfaction - Comparison between the Auditors of Supreme Audit Court and CPAs. An Iranian Evidence

M. Salehi, M. Moradi, A. Dehghan

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Abstract
In the current study, the job satisfaction of the auditors from the supreme audit court and from CPAs in Iran has been compared in terms of welfare factors, development and promotion opportunities, innovation and creativity possibility, manager and colleague behaviour, job security and passing services. Research findings show that job satisfaction of CPAs depends on the promotion and development opportunities, passing services, on the job training and its quality, on the creativity and innovation possibilities and on job diversity. The results illustrates that there is no meaningful differences in terms of welfare factors, manager and colleague behaviour, job security and social position.

Keywords: needs theory, job satisfaction, expectancy theory, supreme audit court, CPA

Introduction
In managing organizations, the human being must be considered a basic resource. The auditors are human resources of auditing institutions, with an important effect on the economic development of the countries. Auditing institutions are responsible for the financial supervision of the entities controlled and for their fiscal statement (Salehi, 2008). The success of these entities depends on the efforts, motivation and satisfaction of the human resources. At the same time, the success, efficiency and effectiveness of auditing institutions depend
on the human resources efficiency, because of their effect upon the countries economic development.

**Research issue**

In a simple definition, job satisfaction means the positive feelings and attitudes of the people, toward their job. Human resource satisfaction is one of the effective factors which increase efficiency.

Fisher and Hana (1931) consider job satisfaction as a mental element and assume it as an emotional consistency to job and employment condition. That means, if the job provides desirable sense for a person, the person would be satisfied. However, if there is no desirable sense, the person would not be satisfied and may change the job. Job satisfaction affects the private life of the people, inside and outside the organization (Grund, 2001). Job satisfaction has a close relationship with the wishes of the people. It means, if a person achieves important values, job satisfaction will be higher (Sherry et al., 1992).

Job satisfaction leads to increase people efficiency, commitment against organization, guaranteed mental and physical health, life satisfaction. Non-job satisfaction leads to anxiety, workableness, desertion and early retirement (Clark, 1997).

Hoppock (1935) introduced job satisfaction as a complex and multidimensional concept that is related to mental, physical and social factors. According to him, job satisfaction is not the result of one factor, but it is the result of a lot of combined factors.

Brophy (1996) divided the job satisfaction theories as follows:

a) *Needs theory*: people job satisfaction depends on two factors: how much demand would be supplied through the achievement related at work and how much demand would not be supplied through the related job?

b) *Expectancy theory*: if there is a high expectancy about job, satisfaction would be achieved difficult. For example, the people may be satisfied if all their expectancies have been achieved through their job.

c) *Role theory*. In this theory, two social land mental aspects would be evaluated due to social aspects, like organization system, workshop system and the work environment.

- Job nature - job itself is one of the most important job satisfaction resource.
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● Using skills and capabilities - lead to the creation of competency and trust in the staff.
● Diversity: in contrast with the scientific management theory, it is believed that desire to specialization and continuous leadership will have results in job satisfaction.
● Promotion - leads to change in leadership, job context, colleagues and revenues.
● Supervision - strong relation and cooperation with the staff are an important factor.
● Job conditions are related to job satisfaction. This are: temperature, humidity, ventilation, sound, light, work hour, cleanliness and tools.

Flexible work time and shortening work weeks are effective factors of job satisfaction. Based on some researchers findings, the satisfaction resources like payments and job nature are the most important factors, promotion and supervision have relative importance and group or work team have less importance (Feldman and Turnley, 1996).

In service organizations, human resource management is also an important factor. That’s why, in this paper, these issues are evaluated in the auditing institutions. We raise the following question: Is job satisfaction of the auditors of ICPA higher than those of the auditors of the Supreme Audit Court, in Iran?

Literature review
A significant part of economic activities has been performed in Iran by official sectors, but during recent years, much activities have been done trough a transfer of these activities to private sectors. In this paper, the job satisfaction of private and official sectors is compared. There is no record about this comparison in Iran in relation to auditors, but there are many researches in the world, as below.

Herzberg et al., (1959) researched about 200 accountants and engineers and the results indicated significant differences between the two groups. According to Herzberg, motivators as development, acknowledgment, responsibility and growth are specific. By encouraging them, job satisfaction will increase. According to him, lack of non-satisfaction did not mean satisfaction. Therefore, health factors assure lack of non-satisfaction. Further findings showed that in relation
with job satisfaction, the related factors to job context are numerous than the related factors to job field.

Albert et al., (1981) used postal questioners to evaluate the behavior of professional employees’ coming from 25 auditing companies. The results of 296 questionnaires showed that despite of a complete partners’ satisfaction, the auditors, leaders and managers are not satisfied.

Dean et al., (1988) has done an evaluation of the changes in some selected samples which includes accountants with low experience from great industrial companies and auditors of eight big audit firms, including auditors and non-auditors staff. Decrease of job satisfaction has been seen in two groups, but this decrease was more significant in the group of the auditors.

Carcello et al., (1991) used questionnaires to evaluate the differences between accounting students and beginner accountants in relation to duties, job responsibilities, development, training, supervision and personal consideration. Findings showed that student expectations were lower as those of the beginner accountants.

Hanafiah et al., (2007) performed a research regarding the relation between job satisfaction, mental pressure and the desire to desertion, of the staff working in auditing institutions from the South of Spain. Findings showed that there were significant relations between job satisfaction, mental pressure and desertion, while factors like the increasing of salary, promotion and high education, leads to increase job satisfaction.

Kass-Shraibman (2008) evaluated the relation between work district, control center, population variables (age, sex, education and salary) and job satisfaction of the American certified accountants. Results show that there is a significant relation between the work in the area of certified accountants (traditional and non-traditional) and job satisfaction. Also, there was a significant negative relation between control center and job satisfaction.

Glen et al., (2008) performed a research to compare job satisfaction of 78 persons of professional accountants from Spain and Russia. Among them, 12 respectively 11 persons have been selected from Russia and Spain. The obtained data trough statistical methods were compared. Results show that job satisfaction of Spain accountants was higher than that of the Russian accountants in terms of supervision, award, development and promotion opportunities.
A recent study conducted by Ghaderi and Salehi (2011) about the level of anxiety between accounting and non-accounting student in Iran showed that non-accounting students have more anxiety than accounting students.

**Research methodology**

In order to obtain relevant data, a questionnaire has been designed and developed. The statistical community includes all the auditors working in the Supreme Audit Court (1173 members), as like the organizational director, technical assistant, executive assistant, general auditor, boss senior auditor, senior auditor and auditors, but also auditors of the Iranian Association of Certified Public Accountants (1049 members) being in organizational position such as managers or partners, senior supervisor, supervisor, senior auditor and auditor. By using the Cochrane formula, the sample size of Supreme Audit Court and the sample size of the Iranian Association of Certified Public Accountants were determined: 89, respectively 88 participants (Total 177). The method of sampling was the ratio random.

To collect the required information, a questionnaire designed by the researchers was used, which was based on other three questionnaires: Job description index (JDI) and Dale (2008) standard questionnaire. Job description index is a compilation by Smith Kendall and Hulin (1969) from Cornell University of America and since then, it was used in different countries. This questionnaire evaluates persons using six categories: nature of work, supervision, coworkers, promotion, salary/benefits and work conditions. The questionnaire contains seventy-two phrases; there is a seven-grade scale for each statement. The first grade indicates the lowest agreement of question respondents and the seventh grade indicates the highest agreement. Validity of this questionnaire is 92.8%.

This questionnaire has three sections: questions about personal details and occupation place, such as age, gender, work experience and education level. Second section contains twenty-six closed questions that are based on Likert’s scale with five options "very satisfied", "satisfied", "moderate", "unsatisfied" and "very unsatisfied " and finally in the third section there is an open question for offering responsive comments, raised issues, additional descriptions and other effective elements about job satisfaction.
For the reliability of the questionnaire, the Cronbach’s alpha coefficient is used. Cronbach’s alpha coefficient resulted from the preliminary sample questionnaire is ($\alpha =0.87$) that indicates that the reliability of the questionnaire is very high.

**Results of the study**

Regarding the obtained data, it was found that the amount of total respondents is about 51.90% employed in the Supreme Audit Court and 48.90% from the Iranian Association of Certified Public Accountants. In addition, 80.30% were male and 19.70% were women. 76% of the total sample was married and 23% were single and one percent has not answered this question. In addition, the youngest person in the sample was 26 years and the oldest person 59 years old.

To test the hypotheses of T-student, independent two samples have been used. Before applying this test, the equity condition of two group’s variances must be evaluated. For this purpose, first the Levene's test has been used, which inspect two groups variances equality. Considering the above-mentioned cases, the research hypotheses were tested (Table 2 and 3). The error level is 5% for all the hypotheses.

**Table no. 1.** General information regarding the participants

<table>
<thead>
<tr>
<th>Variable</th>
<th>Job place</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>development and promotion</td>
<td>Supreme audit court</td>
<td>95</td>
<td>3.3035</td>
<td>1.01262</td>
</tr>
<tr>
<td>opportunities</td>
<td>IACPA</td>
<td>88</td>
<td>3.9318</td>
<td>0.61309</td>
</tr>
<tr>
<td>innovation and creativity</td>
<td>Supreme audit court</td>
<td>95</td>
<td>3.0860</td>
<td>0.79888</td>
</tr>
<tr>
<td>possibility</td>
<td>IACPA</td>
<td>88</td>
<td>3.6439</td>
<td>0.62062</td>
</tr>
<tr>
<td>passing service, training course</td>
<td>Supreme audit court</td>
<td>95</td>
<td>3.4110</td>
<td>1.14258</td>
</tr>
<tr>
<td>and its quality</td>
<td>IACPA</td>
<td>88</td>
<td>3.8739</td>
<td>0.70571</td>
</tr>
<tr>
<td>job diversity</td>
<td>Supreme audit court</td>
<td>95</td>
<td>3.4456</td>
<td>0.76971</td>
</tr>
<tr>
<td></td>
<td>IACPA</td>
<td>88</td>
<td>3.6989</td>
<td>0.62864</td>
</tr>
</tbody>
</table>
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**Table no. 2. Levene’s Test results**

<table>
<thead>
<tr>
<th>Levene's Test for Equality of Variances</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>welfare factors</td>
<td>0.894</td>
<td>0.346</td>
</tr>
<tr>
<td>development and promotion opportunities</td>
<td>30.339</td>
<td>0.000</td>
</tr>
<tr>
<td>innovation and creativity possibility</td>
<td>4.724</td>
<td>0.031</td>
</tr>
<tr>
<td>manager and colleague behaviors</td>
<td>6.677</td>
<td>0.011</td>
</tr>
<tr>
<td>occupational security</td>
<td>22.374</td>
<td>0.000</td>
</tr>
<tr>
<td>passing service training course and its quality</td>
<td>33.712</td>
<td>0.000</td>
</tr>
<tr>
<td>job diversity</td>
<td>4.072</td>
<td>0.009</td>
</tr>
<tr>
<td>job place</td>
<td>18.019</td>
<td>0.000</td>
</tr>
</tbody>
</table>

**Table no. 3. T-test’s results**

<table>
<thead>
<tr>
<th>T-test’s Test for Equality of Means</th>
<th>T</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>welfare factors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>-1.586</td>
<td>0.114</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>1.583</td>
<td>0.115</td>
</tr>
<tr>
<td>development and promotion opportunities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>-5.029</td>
<td>0.000</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>-5.119</td>
<td>0.000</td>
</tr>
<tr>
<td>innovation and creativity possibility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>-5.247</td>
<td>0.000</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>-5.297</td>
<td>0.000</td>
</tr>
<tr>
<td>manager and colleague behaviors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>-0.316</td>
<td>0.752</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>-0.320</td>
<td>0.750</td>
</tr>
<tr>
<td>occupational security</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>-0.190</td>
<td>0.850</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>-0.192</td>
<td>0.848</td>
</tr>
<tr>
<td>passing service training course and its quality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>-3.247</td>
<td>0.001</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>-3.304</td>
<td>0.001</td>
</tr>
<tr>
<td>job diversity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>-2.426</td>
<td>0.016</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>-2.445</td>
<td>0.015</td>
</tr>
<tr>
<td>job place</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>-1.910</td>
<td>0.058</td>
</tr>
</tbody>
</table>
First hypothesis: the job satisfaction degree of the auditors from ICPA concerning welfare factors is higher than those of the auditors from the Supreme Audit Court.

Considering the F statistics and p-value (Table 2), the significance level of welfare factors is higher than 0.5%. Using the two-samples t-test (Table 3) can be observed that the significance level of the welfare factors is more than 5% (0.114). Results that the $H^0$ hypothesis is not rejected in significance level of 0.5% in welfare factors. That means, there is not a significant difference between the auditor’s job satisfaction members of ICPA concerning the welfare factors and the auditors of the Supreme Audit Court.

Second hypothesis: the job satisfaction degree of the auditors from ICPA concerning promotion and advancement opportunities is higher than those of the auditors of the Supreme Audit Court.

Considering the F statistics and p-value (Table 2), the significance level of promotion and advancement opportunities is less than 0.5% (0.000). Using the independent two-samples t-test (Table 3) it was observed that a significance level of promotion and advancement opportunities is less than 0.5% (0.000). Therefore, results that $H^0$ hypothesis in significance level of 0.5% is repudiated and regarding to Table nr. 1, the average of satisfaction concerning promotion and advancement opportunities between the auditors of ICPA is higher than those of the auditors of the Supreme Audit Court.

Third hypothesis: the amount of auditors’ job satisfaction from ICPA concerning possibility of creativity is higher than that of the auditors from the Supreme Audit Court.

Considering the F statistics and p-value (Table 2), the significance level of promotion and advancement opportunities is less than 0.5% (0.03). The variances of two groups are not equal with each other. By using the independent two-samples t-test (Table 3), it was observed that the significance level of possibility of creativity is lower than 0.5% (0.000). Therefore, it results that $H^0$ hypothesis in significance level of 0.5% is repudiated and regarding Table nr. 1 results that the average of satisfaction possibility of creativity among auditors of ICPA is higher than that of the auditors of the Supreme Audit Court.

Fourth hypothesis: the amount of job satisfaction concerning the behavior manner of managers and colleagues of the auditors from ICPA is higher than those of the auditors of the Supreme Audit Court.
Considering the F statistics and p-value (Table 2), significance level of promotion and advancement opportunities is less than 0.05% (0.011). Because the variances of two groups are not equal with each other, in the t-test variances equity rejecting must be used. Using the independent two-samples t-test (Table 3) it was observed that a significance level of behavior manner of managers and colleagues is higher than 0.5% (0.750). Therefore, results that $H^0$ hypothesis in significance level of 0.5% is not repudiated. It means that there are not significant differences between the job satisfaction of the auditors of ICPA concerning the behavior manner of managers and colleagues and those of the auditors of the Supreme Audit Court.

Fifth hypothesis: the amount of job satisfaction regarding the job security of the auditors of ICPA is higher than those of the auditors of the Supreme Audit Court.

Considering the F statistics and p-value (Table 2), significance level of Job security is less than 0.05% (0.011). The variances of two groups are not equal with each other. In t-test; variances equality rejecting must be used. By using independent two-samples t-test (Table 3) it was observed that significance level of Job security is more than 0.5% (0.848). $H^0$ hypothesis in significance level of 0.5% is not repudiated; it means that there is not significant difference between the job satisfaction of the auditors of ICPA concerning job security and those of the auditors of the Supreme Audit Court.

Sixth hypothesis: the amount of auditors’ job satisfaction of the auditors of ICPA concerning passing service education periods and its quality is higher than those of the auditors of the Supreme Audit Court.

Considering the F statistics and p-value (Table 2), significance level of passing service education periods is less than 0.5% (0.000). The variances of two groups are not equal with each other. During using t-test variances equity rejecting must be used. By using independent two-samples t-test (Table 3) it was observed that significance level of passing service education periods is less than 0.5% (0.001). Therefore, $H^0$ assumption in significance level of 0.5% is repudiated. Taking into account Table nr. 1, we conclude that the average of satisfaction of passing service education periods among the auditors of ICPA is higher than those of the auditors of the Supreme Audit Court.

Seventh hypothesis: the amount of auditors’ job satisfaction of the auditors of ICPA concerning diversity in work is higher than those of the auditors of the Supreme Audit Court.
Considering the F statistics and p-value (Table 2), significance level of diversity in work is less than 0.5% (0.009). Thus, the variances of two groups are not equal with each other; during using t-test variances equity rejecting must be used. Using the independent two-samples t-test (Table 3) it was observed that significance level of diversity in work is less than 0.5% (0.015). H₀ hypothesis in significance level of 0.5% is repudiated. The average of satisfaction of diversity in work among the auditors of ICPA is higher than those of the auditors of the Supreme Audit Court.

*Eighth hypothesis:* the degree of job satisfaction concerning social position of auditors of ICPA is higher than those of the auditors of the Supreme Audit Court.

Considering the F statistics and p-value (Table 2), significance level of Job place elements is less than 0.5% (0.000). Thus the variances of two groups are not equal with each other. During using t-test, variances equity rejecting must be used. Table 3 shows that the significance level of Job place elements is higher than 0.5% (0.054). H₀ hypothesis in significance level of 0.5% is not repudiated; it means that there is not significant difference between the job satisfaction of the auditors of ICPA concerning social position and those of the auditors of the Supreme Audit Court.

**Other findings**

Various theories analysis the impact of personal factors on job satisfaction: age, gender, work experience and education. In some of the studies, the impact of these factors has been proved on job satisfaction, and others have disparaged its influence. Kronk’s (2009) research finding shows that there is a significant and positive relationship between the gender, the different levels of education and job satisfaction. However, Donnel (2007) shows that there is no significant relationship between the biography variables (age, gender and difference in education) and job satisfaction. In many studies have been proved that younger people are more satisfied. An increase in the age means job satisfaction decreasing. It seems that the young forces have more energy and motivation to achieve the career vocational goals. Regarding Table 4, the Pearson correlation coefficient is equal to 0.263; that shows auditor’s job satisfaction in both groups was not associated with the age. While in other similar foreign studies, an increase in the age means job satisfaction increase (Melany et al., 1999).
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Table no. 4. Pearson Correlation results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Test</th>
<th>Age</th>
<th>Job Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>0.083</td>
</tr>
<tr>
<td></td>
<td>Significance level</td>
<td>0</td>
<td>0.263</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>183</td>
<td>183</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>Pearson Correlation</td>
<td>0.083</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.263</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>183</td>
<td>183</td>
</tr>
</tbody>
</table>

Another research shows that job satisfaction by men is higher than by women (Table 5). Perhaps, the main reason for lower degree of satisfaction among women might be the lack of flexibility and long hours of audit working. That will lead to social pressures because of the responsibilities women have for their own families. In addition, satisfaction rate according to gender showed a significant difference, comparing with similar studies (Humermsh, 2001).

Table no. 5. Group Statistics regarding to the Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>147</td>
<td>3.480</td>
<td>0.537</td>
<td>0.044</td>
</tr>
<tr>
<td>Femal</td>
<td>36</td>
<td>2.283</td>
<td>0.522</td>
<td>0.087</td>
</tr>
</tbody>
</table>

Regarding to the information mentioned in Table 6, Single people are more satisfied than the married one.

Table no. 6. Group Statistics Regarding to Marital Status

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>42</td>
<td>3.583</td>
<td>0.522</td>
<td>0.0808</td>
</tr>
<tr>
<td>Married</td>
<td>139</td>
<td>3.585</td>
<td>0.528</td>
<td>0.0448</td>
</tr>
</tbody>
</table>

The higher the education level is, the higher the job satisfaction will be. This group has expressed more satisfaction due to the information in Table 7 and 8.
### Table no. 7. The results of ANOVA

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>5.745</td>
<td>3</td>
<td>1.915</td>
<td>7.279</td>
<td>0.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>47.98</td>
<td>179</td>
<td>0.263</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>52.84</td>
<td>182</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 8. The results of Duncan Test

<table>
<thead>
<tr>
<th>Education levels</th>
<th>N</th>
<th>Subset for alpha = 0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Diploma</td>
<td>7</td>
<td>3.0179</td>
</tr>
<tr>
<td>student</td>
<td>21</td>
<td>3.1127</td>
</tr>
<tr>
<td>Bs.</td>
<td>103</td>
<td>3.4347</td>
</tr>
<tr>
<td>MA.</td>
<td>52</td>
<td>3.6478</td>
</tr>
<tr>
<td>Sig.</td>
<td></td>
<td>0.578</td>
</tr>
</tbody>
</table>

### Conclusions

Since in recent years, all the employees from the same level have identical salaries and benefits, these elements have a great influence on identical job satisfaction concerning welfare factors in both groups.

The auditors of ICPA have a better, deeper and more meaningful perceived about their job, according to their special properties. One of the reasons may be the connection between their field of education and their job/activity.

Hanafiah et al., (2007) showed that physical factors such as increasing salary, promotion job status and tertiary education leads to increase job satisfaction.

The Supreme Audit Court, being a governmental institution which controls the financial activities of the executive agencies, should obey the homogeneous/equal rules and financial approvals; the employees must accomplish their duties within a framework and a certain path. The regulations, approvals, instructions and activities of ICPA are various and the staff have a lot of opportunities for innovation and making their potential talent to efflorescence.
A study of job satisfaction – comparison between the auditors of ……

Bibliography


Theoretical Considerations on the Influence of the Auditor’s Independence on Audit Quality

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Abstract
Although no method has been found yet to guarantee the optimum quality level for the financial information users, and implicitly the quality of accounting and audit services, the efforts concerning these aspects have lately intensified, and a multitude of elements that influence quality in audit and the accounting profession are analyzed and interpreted by many authors. In our research, we aim to analyze the manner in which ethical and moral principles, especially the auditor’s independence, may influence the quality of audit. The purpose of this paper is to stress the connection between ethical principles, responsibility and quality in accounting.

Keywords: ethical principles, the auditor’s independence, audit quality, professional responsibility

Introduction
Without being too exhaustive in our approach, we can state that this feature of financial-accounting information, quality, dominates the world of accounting and audit services, and it is at the same time controversial as well delicate and necessary. Moreover, we consider the quality of the accounting/audit profession to be one of the essential conditions that lie at the basis of quality financial reporting and implicitly of a favorable approach from an economical perspective.
The need and importance of ethical, professional and personal behavior norms come both from the important role played by freelance accountants towards the state and society, and from the essential requirement of service quality, based on science, competence and conscience, independence in spirit and lack of material interest, morality, probity, dignity and professional behavior.

The lack of ethical and moral principles in accounting and audit would create the premises for “legal fraud”, which are not necessarily dependent on creativity, but rather on the weakness of an accounting system lacking ethical norms and principles, in short, lacking quality. Under these circumstances, if we refer to the importance of ethics in accounting, without becoming overly exhaustive in our approach, we could state that the purpose of their occurrence was to guide economic life. As a result, the Machiavellian slogan “the end justifies the means” is out of place in the world of transactions, in a moral economic competition. We subscribe to the opinion that the truth that accounting attempts to build as a true and fair view is one of the virtues that ethics, morality, and religion cultivate as a priority (Horomnea E., 2012). Specifically, accounting observes, records, quantifies, processes, and communicates specialized information to a well determined market: internal and external users.

Without the compliance with moral principles and norms, contemporary world is subject to chaos. Therefore, in the current economic context, the mission of the accounting professional has crossed the borders of a simple job and has come to mean the guarantee of the correctness of the public information provided by economic entities.

**Material and Methods**

In our approach, the dominant research stream is the positivistic one, aiming to explain, through a detailed and advanced approach, the various sides of the effects of ethical principles on quality in audit and the accounting profession, in the conditions of performing a responsible and quality audit activity.

This paper comprises elements of the interpretative and critical streams, as various norms, regulations and practices in the field will be discussed in an interpretative manner (a neutral point of view is adopted), as well as critical one (involvement in a particular viewpoint). The research will be fundamental and its purpose will be a theoretical
generalization after noticing the insufficiency of knowledge in respect to the importance and need to apply ethical principles, quality and responsibility in audit and accounting, as well as identifying certain facts, for which theorization was not suggested.

**Literature review**

Accounting and the accounting professional resort to virtues such as: justice, prudence, probity, dignity and the professional deontology of the accounting expert is concentrated in the slogan “Science, Independence, Morality”. The correlation between ethical principles and those of the “science of accounts” comes from the fact that any deliberate alteration of the truth is a forgery of reality, an abdication from ethical and moral principles.

According to Arens and Loebecke (2004), there are several methods through which the accounting profession and society as a whole encourage auditors and accounting professionals to behave appropriately and provide high quality financial-accounting and audit activities, like: quality control, continuous training demands, legal liability, peer evaluation, the professional behavior code and exams for accessing the profession.

Ethics can be defined as a set of principles that give value to morality. Ethical behavior is necessary for a society to work in an orderly manner. Moreover, the need for ethics is important enough for various moral values to be included in laws. The AICPA professional behavior code provides both, general norms for an ideal behavior and specific behavioral norms, with concrete application.

At an international level, IFAC (the International Federation of Accountants) adopted the international ethical code of accounting professionals. In the opinion of Horomnea E. (2011), the need for the Ethical Code comes from: insuring optimal quality; preserving public trust in this profession; attracting and preserving the customers of audit services; validation of the work performed by accounting professionals; insuring protection for the financial auditor and for the users of audit services; defending the honor and independence of the accounting professionals and of the body they are part of.

The main representative of the free accounting profession in Romania is The Body of Accounting Experts and Certified Accountants of Romania. With over 90 years of activity, it was involved not only in the practical regulation of the financial-accounting activity, but has also
constantly promoted the ethical side of the accounting profession. Also, as a member of the International Federation of Accountants (IFAC), it permanently contributes to meet the objectives of developing and promoting the accounting profession, coordinated at the world level with harmonized standards. A necessity of the past as well as of the present, created with the purpose of improving the uniformity level of professional ethics and to establish behavioral norms for all the accounting experts in Romania, *The national ethics code of the accounting professionals*, compulsory since January 01, 2007, formulates the fundamental principles that must be applied and complied with by all professionals, and especially by all members of the Body, in order to achieve the common objectives, according to the *International Ethics Code* issued by the world accounting body, IFAC. Moreover, the new *National Ethics Code of the Accounting Professionals*, approved by the Decision of the High Council of the Body of Accounting Experts and Certified Accountants in Romania, no. 11/216 of March 31, 2011, based on the Decision of the National Conference of the accounting experts and certified accountants no. 10/65 of September 2, 2010, is compulsory for all CECCAR members in accomplishing the professional services in Romania, starting with January 01, 2011.

Also, the Chamber of Financial Auditors in Romania adopts in its entirety *the Ethical Code of Accounting Experts, issued by the International Federation of Accountants (IFAC)*, version July 2009.

**The impact of the auditor’s independence on the quality of the financial-accounting information published**

All professions, irrespective of the field they belong to, are governed by rules, standards and principles that must be complied in good conditions. According to Popa, Tiron, Tudor (2012), because of the peculiar and confidential nature of many services, as well as of the need of the beneficiaries to be able to trust them, professionals are subjects of technical, ethical and moral rules.

As we mentioned in the previous section, in a modern society, a distinctive feature of the accounting profession consists in establishing and acquiring a *professional deontology code*, which stipulates the exact optimum level of the behavior necessary for each accounting professional, since he joins the profession. For this reason, each accounting expert/auditor in Romania is responsible to comply with the
Theoretical considerations on the influence of the auditor’s influence of the auditor’s...
name associated to an auditor classified as lacking independence, thus minimizing the users’ trust in the financial statements in which they exerted their profession. Moreover, the affected third parties may resort to legal competence bodies in order to obtain compensations for the denigration of the company’s image because of the lack of independence of the auditor who verified the financial statements. They also benefit from the active support of professional organizations, as well as of supervision bodies, in order to repair the situation.

In a study, Collier and Gregory (1999) analyzed the relationship between the audit committee and agency-specific factors, including the quality of the auditor. They noticed that the activity of the audit committee increases in companies whose costs are higher. The quality of the activity performed by the auditor and the lever effect are tightly connected to the activity of the audit committee, being indirectly proportional with the degree of inclusion in the company of the people. *The authors recommend preserving the independence of the audit committee for increasing the quality of the auditors involved in audit missions, but they cannot guarantee if the improvement in the activity of the audit committee will insure performance.*

In the audit of financial statements, the auditor must apply a control methodology that insures his independent opinion, able to judge or defend equally all the users of the accounting information, all the actors participating in economic and social life, respectively the shareholders, the state, the employees, the banks, the third party debtors, the providers, etc. (Costuleanu et al., 2011).

**Results and Discussion**

In recent years, special accent has been placed on high quality practices in the accounting profession worldwide. Besides, there are numerous studies concerning *ethics*, confidentiality and professional behavior. It has been practically proven that, in the context of the evolution of the economic situation at the world level, as well as in our country, the financial auditor is the professional who can contribute in a significant extent at the healing of the economic climate and at the reestablishing of the confidence in business. *Through professionalism, independent attitude and transparency in performing audit mission, through drawing quality reports, in conformity with the international standards and with the ethical code of the profession, the auditor meets the public interest, fulfilling at the same time an important social role.*
Moreover, after verifying and certifying the information provided to the users by an ethical, competent and independent auditor, favorable conditions are created for (re)establishing the confidence between the producers and the users of the accounting information.

**Conclusion**

The accounting profession, like other professions, faces new challenges because of the continuous legislative changes, of the occurrence of new types of accounting/audit and insurance services, of the impact of the new information and communication technologies, of the increase in the number and quality of professional standards, of the appearance of new software products, of new reporting methods, etc. Moreover, the accounting profession must take responsibility for the public interest in providing high quality services, while complying with professional standards.

We conclude by stating that accounting professionals are actors on a market where the demand and offer of accounting information are confronted. They must be aware of the important role they have on this market, provide a fair view of the financial position and of the performance of the company, analyzed in the conditions of complying with the ethics code in completing the accounting act and taking responsibility in the performed activity. A good professional nowadays knows what the Romanian accounting reform means, learns to understand and apply the International Standards of Financial Reporting, as well as the International Audit Standards, is aware of the importance and scope of the application of professional reasoning, councils the company management in supporting accounting policies, is subject to the Professional ethics code, being aware of the limitations of his judgments. He must acquire knowledge and use professional reasoning correctly. Finally, competence comes first, together with responsibility. Considering these aspects, there is an obvious connection between: the importance of fundamental ethical principles, the impact of the auditor’s independence on the quality of financial-accounting information published, responsibility and quality in the accounting profession.

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**Bibliography**


Considerations regarding the Entities Accounting Politics

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Abstract
This study's objective is to highlight the awareness of the Romanian accounting environment regarding the development importance of the accounting policies in the present context of harmonizing the Romanian accounting system with the European directives and IFRS. The article brings into discussion the handbook for accounting policies and procedures, a comparison between the method in which the accounting policies are regarded in the Romanian accounting regulations, as well as in IFRS.

Keywords: accounting policies, procedures, European directives, accounting policies handbook, IFRS

Introduction
Before the appearance of the Romanian accounting standards harmonized with the European directs and IFRS (OMFP nr. 94/2001, OMFP nr. 306/2002, OMFP nr. 1752/2005, OMFP nr. 3055/2009), the accounting policies were asked to be filled via an Annex (the last one) of the balance sheet, without being given much importance.

As in the context of the Romanian accounting regulations approved by OMFP nr, 3055/2009 "Accounting regulations harmonized
with the European directives", the accounting policies are handled in the contents of 9.1"Accounting policies". At the level of International Accounting Regulations (IAS-IFRS), rules of the implementations and approaches of accounting policies are handled in IAS 8 standard, "Accounting policies, changes of accounting estimations and errors". The objective of IAS 8 is to "subscribe the selection and modification criteria of the accounting policies, together with the treatment, and presentation of accounting information according to the changes of the policies, estimations and error corrections". (IAS 8, 2009, section 1)

**Material and Methods**
In this paper we use the comparative analysis between methods of showcasing the accounting policies in the Romanian norms (OMFP 3055/2009) and IAS-IFRS.

**Literature review**
In the 2000's, an important role in the development and research of the accounting policies had N. Feleaga and L. Malcui, true the publication of the books "Policies and accounting options. In their research, Feleaga and Malcui (2002) highlights in the first chapter, "Directives to define accounting concepts policies and options", two definitions of the accounting policies. The first is the definition given by the accounting dictionary of Oxford University, and the second one is the more detailed definition of Christopher Nobes.

Nobes in 1999, define the accounting policies as like "detailed methods of evaluation, measurements and recognition corresponding to the law, or accounting standards and practices, chosen by an entity".

Another contribution in the field of research, according to the accounting policies of an entity is attributed to M. Ristea. He made a distinction between accounting policies and methods. In 2000 he highlight the fact that "if accounting policies are options regarding the basic principles of evaluation, conventions, rules and specific adopted procedures at the compilation of the financial statements, then the methods are the treatments and procedures used by the entity.”

Ristea and Dumitru in 2012, shows that "the accounting policies are the used steps by an entity orientated towards the adoption of principle, bases, conventions, rules and specific practices, to compile and present financial reporting".
The Business Dictionary define the accounting policies as been "principles, rules and procedures selected and consistently followed by the management of an organization (the accounting entity) in preparing and reporting the financial statements".

Feleaga et al. (2008) brings in the content of table of their book called "Policies and accounting options" a number of contributions in the field of accounting research regarding recognition, evaluation and presentation in the financial statements of the accounting policies, as like other policies regarding the financial reporting.

A. Dutescu makes a significant contribution to contemporary accounting publishing landscape in Romania. Through her book (Dutescu, 2003) she presents "a detailed model regarding the accounting policies applied in the enterprise X", model resulted from the experience gained by the collaboration with a number of significant Romanian entities.

The guide for understanding and using the International Accounting Standards (Dutescu, 2001) shows that "in the explanatory notes will contain the accounting policies adopted by the company to determine the values of the elements of the financial statements (examples: use of historical account, the value of the reevaluated assets and use of the current method for the conversion of currency)".

**Results and Discussions**

Accounting policies used by an entity must contain: general accounting principles according to the current regulations, calculation bases, methods and procedures, conventions, evaluation rules, specific practices adopted by the entity at the compilation and presentation of the annual financial statements. The Practical Guide to Order 3055/2009 shows that depending on the presentation for the accounting policies, these can be shown as:

- as a document (hand written) containing rules and accounting treatments according to the accounting regulations, as well as documents which are the basis of recording the economical and financial events;

- two or more documents which make up a whole, such as the case of entities which use complex software with standardized procedures and recordings.

It's necessary for the management of each entity to write down a manual of accounting policies and applying procedures for all the
operations taking place during the financial exercise, taking into account the entity's activity and the strategy used. The entity's financial and accounting specialists have to take part in filling the book of accounting policies and applying procedures. These specialists know well the activities which take place in the entity, as well as the strategy written down by the management. They must take into consideration the controls which ensure that the book is respected, when they are developing personalized accounting policies and procedures for the situation presented in the legislation.

In case of groups, is necessary to elaborate a set (handbook) of procedures regarding the specific activity and the adopted strategy. After finalizing the procedures created for the preparation of consolidated financial statements, this will be sent to all of the entities included in the group, contributing to the consolidated financial statements.

The main procedures and methods are presented as follows:
- evaluating and accounting procedures of the fix and intangible assets;
  - evaluating and accounting the financial instruments;
  - accounting the leases;
  - accounting the public subsidies and the information regarding public support.
- valuation and accounting method for the cost of inventories and work in progress;
- accounting method for the tax results as well as for the deferred taxes;
- accounting method for the expenditures on pensions;
- accounting the effects of variations in foreign currency rates;
- criteria to establish the business segment and the geographical segment as well as methods to assign the income and expenses between segments;
- accounting the provisions for risks and changes;
- accounting the borrowing costs;
- recognition and valuation of the income and events occurring after the date of the balance sheet;
- policies regarding the accounting of groups;
- direct and indirect methods used for calculating the cash flow from operating activities, investments and funding;
- methods of valuation and accounting for the short-term and long term receivables;
Considerations regarding the entities accounting politics

- methods of recognition and valuation of short term employee benefits, percentage of profit and bonus plans;
- accounting the income from the ordinary activities;
- methods of calculating the index “earnings per share”;
- accounting politics and options regarding the comparability of financial statements.

Controls should be taken into account in order to ensure that the handbook is used correctly (controls should be taken to evaluate the weak and sensitive spots, find the anomalies as well as to fix them in order for the financial statements to offer relevant and credible information according to the needs of the users who take decisions based on them).

In the following table, we make a comparative study regarding the accounting policies used, based on the Romanian norm OMFP 3055/2009 and on IFRS.

<table>
<thead>
<tr>
<th>Romanian norm OMFP 3055/2009</th>
<th>IFRS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Defining the accounting policies</strong>&lt;br&gt;The definition of the accounting policies present in OMFP 3055/2009 is the same as the one in the IFRS (OMFP 3055/2009, pct. 267(1))&lt;br&gt;The method of depreciation is regarded as accounting policy.</td>
<td><strong>Defining the accounting policies</strong>&lt;br&gt;According to IAS 8, pct. 5, the accounting policies “are the specific principles, bases, conventions, rules and practices applied by an entity in preparing and presenting financial statements.”&lt;br&gt;The depreciation method is regarded as an estimate (IFRS for small and medium entities)</td>
</tr>
<tr>
<td><strong>Selecting and applying the accounting policies</strong>&lt;br&gt;Toma et al (2010) says that “OMFP 3055/2009 does not contain a hierarchy of guidance which should be used when there’s no strict ruling in the national norms, or a general exception for the significant transactions”.</td>
<td><strong>Selecting and applying the accounting policies</strong>&lt;br&gt;In order to select and accounting policy, when IFRS doesn’t give specific ruling for a certain transaction, event or condition, the entity’s management should refer to and take into account, applying the following sources, in the following order, according to IAS 8, pct. 11:&lt;br&gt;a) what the IFRS says when referring to similar issues;</td>
</tr>
</tbody>
</table>
b) definitions, criteria, recognition and concepts of valuation for assets, debt, income and expenses in the general framework.
If there isn’t an IFRS which treats a transaction, an event or condition in a specific way, the entity’s management should use the professional reasoning in order to create an accounting policy, which offers relevant and reliable information.

Changing the accounting policies can be done at the initiative of the entity’s management or are required by the law (it’s the decision of an authority which creates the accounting norms).
In the first situation, the change in policy should be explained and justified in Note 6 attached to the financial statements.
In the second situation, the change in accounting policy won’t affect the notes attached to the financial statements.
In OMFP 3055/2009, pct 40(2) compiles the situations which can lead to changes of accounting policy. The Romanian norms comments on the differences in accounting policies and estimates.
Feleaga et al (2008) says that the estimation techniques are “methods and estimations used by an entity in order to determine the monetary value which correspond to the measuring basis selected for the assets, debts, incomes, losses and the evolution of owners’ funds”.

Berheci (2010) says: “the change in accounting policies should be made only if it’s required by the entity’s statutory document or by an organism which creates accounting norms or if the change has as effect a better and more reliable presentation of events or transaction in the financial statements (more relevant and more reliable information is obtained). A change in accounting policies should be applied to the past, with the requirement to determine the impact of the change on the oldest opening balance sheet, comparatively, as if the new method has always been applied.”
Conclusions

In order to use an accounting system which offers performance, adapted to the European directives and IFRS, developing accounting policies within each entity becomes an essential aspect in order to offer reliable information on financial position, financial performances and cash flow within the entity.

The accounting policies used and established by the management of each enterprise represent a decisive factor in filling out and presenting the financial statements, which have to offer readable, relevant and reliable information to the users in order for the decisions to be based on them.

A modern accounting harmonized with the European and international norms means creating improved accounting procedures and politics, as well as estimating techniques. The entities’ management and the practitioners located outside the accounting world have started to understand the importance which needs to be given to developing accounting policies and estimating techniques, as long as we want an improved accounting system adapted to the European and international demands.

Bibliography


*** OMFP nr. 3055/2009 pentru elaborarea Reglementărilor contabile conforme cu directivele europene publicat în MO nr. 766/2009 cu modificările ulterioare

Aspects regarding the main Obstacles on the Development of SMEs’ Management in West Region of Romania

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Abstract
The success of achieving organizational objectives depends on the skills and capacities of entrepreneurs-managers to form optimal combinations of functions and to identify their intensity in processing at different stages of the business life cycle. Inside small and medium size enterprises not all functions have the same intensity of achievement. In what follows, we will present the description of the functions in small and medium enterprises in the West Region of Romania and the main problems faced by the entrepreneurs-managers in their implementation.

Keywords: competitive economy, management, competition, function, performance

Introduction
The quality of management for small and medium businesses is a key factor in ensuring economic efficiency at economic unit level and at mezo and macroeconomic level. Surpassing the small and medium business management issues, we note that knowledge management is now more necessary than ever, considering it as a factor in building an intelligent economy due to the increased competition between all the economic “rivals”. The lack or insufficiency of knowledge in the management field generates multiple problems in ensuring and organizing an efficient management of the enterprise’s resources. We
emphasize the need for further research in the management field, considering it a factor with major impact on the development of small and medium businesses in the competitive economy conditions.

**Materials and methods**

Recognizing the role of small and medium enterprises in the sustainable development of the national economy, in this chapter we have set the objective to detect obstacles in the management development of this category of enterprises, through the information collected from interviewing entrepreneurs-managers who volunteered to participate in the research.

In the undertaken research we were driven by the following principles:

- principle of causality;
- correspondence principle, which serves in checking the validity of the established conditions;
- principle of observation;
- complementary principles allowed mutual additions of certain concepts, data and information.

During the achievement of the scientific research of small and medium businesses management, the following conditions have been met:

- logical consistency of the data and information used;
- deductibility of utterances;
- completeness of the selected information.

1. type of business: micro - small - medium.
2. age of entrepreneurs-managers: up to 25 years - 26-35 years - 36-45 years - 46-55 years - over 56 years.
3. the company's durability: up to 1 year - 1-3 years - 4-6 years - 7-9 years - 10 years

- comparison process. The results obtained were included in tables, which allowed the deduction of conclusions on the observed economic and managerial phenomena. Data were presented through tables and diagrams, which allowed visualization and correlation structuring based on specific criteria of the researched domain.

Methodologically, the research was based on interference (deduction, induction), analysis, synthesis, scientific observation and
questionnaires. The applied questionnaire is a mixed type and compresses 34 questions, which were grouped into 4 categories:

- Questions that elucidate general information about the company.
- Questions that elucidate information about entrepreneurs.
- Questions that emphasize the performance of management functions.
- Questions that highlight problems and obstacles related to the achievement of business functions.

As respondents in the survey were top managers of companies, either as employees or as business owners.

The research objective are SMEs with a turnover greater than zero (except enterprises from the financial sector, state and municipal enterprises). The sample consisted of 80 firms from the West Region, selected according to the following criteria:

- income from sales
- number of employees
- type of ownership (private).

**Literature review**

Multiple scientific studies have been devoted to the management of SMEs, each author being original by formulating approaches, submitting recommendations, tracing new directions for the research and development of the investigated area.

A major contribution in studying the role and importance of SMEs in the sustainable development of the national economy has: O. Nicolescu., Russu C., Rusu C., Sasu C., Istocescu A., Mureşanu D, Istudor N., I. Ursachi etc.

From the notorious personalities, known and appreciated worldwide, our attention has been given with priority to: L. Greiner, N. Churchill, V. Lewis, A. Gibb, L. Davis, who focused on research development of SMEs in terms of their passage through life cycle stages and compliance of entrepreneurs' knowledge, leadership style, management strategies and specific characteristics of each stage.
**Results and discussion**

The commercial function is one of the main functions of the entities. The commercial function includes three basic activities:

1. material and technical supply - this activity ensures the procurement of material factors of production necessary for the production/service delivery process and ensures business continuity;
2. selling - through this activity is performed, de facto, the production transfer from the seller's property to the property of the buyer;
3. marketing - through this ensemble of activities the consumer needs are determined, the competitive advantages of the company's products and/or services are formed, creative solutions to promote the company's products/services are searched and strengths of competitor's products/services are identified.

Figure nr. 1 presents the main obstacles faced by entrepreneurs-managers, in the technical and material supply activity of the enterprise.

The acquisition price is the main obstacle, indicated by 53.6% of respondents in the supply with the necessary resources and materials involved in the economic activity of SMEs, which directly influences the volume of acquisitions and the level of quality of the purchased goods. Government regulations relating to imports are the second obstacle in the material and technical supply activity, as indicated by 30.7% of respondents. Of the quality of the purchased goods are concerned only 21.9% of participants in the questionnaire. Accordingly, we can deduce that local entrepreneurs in the process of supplying resources for the enterprise put more emphasis on the purchase price, rather than on their quality. The rate and supply conditions are considered obstacles in the supply activity for 18.4% and 17.6% of respondents.

In order to attract a greater number of consumers, small and medium enterprises form marketing mixes in order to obtain competitive advantages for their products and/or services. In Table 1 are presented the competitive advantages of product/service of the surveyed enterprises, with their distribution on types of enterprises.
Figure no. 1. Obstacles in the company’s supply activity, indicated by the survey participants (%)

Table no.1: The competitive advantage for products/services, on types of enterprises (%)

<table>
<thead>
<tr>
<th>Benefits/advantages offered by products/services offered by the company</th>
<th>Total</th>
<th>Dimension of the enterprise</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>micro</td>
</tr>
<tr>
<td>Used prices</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Quality</td>
<td>23,6</td>
<td>35,8</td>
</tr>
<tr>
<td>Prompt delivery</td>
<td>22,0</td>
<td>17,9</td>
</tr>
<tr>
<td>Packaging</td>
<td>1,8</td>
<td>-</td>
</tr>
<tr>
<td>After - sales service</td>
<td>3,6</td>
<td>3,6</td>
</tr>
<tr>
<td>Price + quality</td>
<td>4,4</td>
<td>8,9</td>
</tr>
<tr>
<td>Quality + After - sales service</td>
<td>29,0</td>
<td>28,6</td>
</tr>
<tr>
<td>Price + After - sales service</td>
<td>1,8</td>
<td>-</td>
</tr>
<tr>
<td>Price + prompt delivery</td>
<td>2,6</td>
<td>1,8</td>
</tr>
<tr>
<td>Quality + Packaging</td>
<td>0,9</td>
<td>-</td>
</tr>
<tr>
<td>Price+ quality + packaging</td>
<td>1,7</td>
<td>-</td>
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<tr>
<td>Price+ quality +</td>
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<td>1,7</td>
</tr>
</tbody>
</table>
In the trade activity, 35.7% of micro enterprises focus on price in order to attract a larger number of buyers and 28.6%, in price and quality. The promptness of deliveries was mentioned only by 4.9% of small businesses. 5.0% of small businesses gain competitive advantage for their products by offering a combination price + quality + prompt delivery. Medium enterprises (42.9%) obtain competitive advantages through the quality and price mix.

The personnel function focuses all activities on ensuring quantitative and qualitative workforce necessary to achieve business objectives. In small and medium businesses, personnel are the essential production factor, which assure the capitalization of the other production factors. In order to ensure efficient development conditions, entrepreneurs-managers must assure optimal conditions for the personnel employed, to hire competent persons, devoted to that work.

We analyzed the evolution in the number of people employed in the surveyed SMEs, in the total number of respondents, as well as on each category of enterprises.

The fact that in 58.8% of the enterprises the number of employees remained stable does not mean that in these enterprises there were no staff inputs and outputs. The number of staff stability phenomenon tells us that the company has remained at the same stage of the life cycle. As a result of business development, in 28.9% of the enterprises the personnel number increased. Increases were registered in 14.9% of small businesses, 7.9% of medium enterprises and 6.1% of micro enterprises.

Under the influence of the global economic crisis, 11.4% of enterprises were forced to reduce the number of personnel. However, the share of enterprises whose personnel number increased or remained stable is 7.6 times higher than the number of enterprises that have resorted to layoffs. This shows that SMEs are able to resist under the

<table>
<thead>
<tr>
<th>After - sales service</th>
<th>Price+ quality + prompt delivery</th>
<th>-</th>
<th>2.4</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price+ quality + prompt delivery + After - sales service</td>
<td>1.7</td>
<td>1.7</td>
<td>4.9</td>
<td>7.1</td>
</tr>
</tbody>
</table>
Aspects regarding the main obstacles on the development of SMEs…….. 43

influence uncertain economic factors, and in some cases, to find in these conditions business development opportunities.

The information obtained illustrates that medium-sized enterprises are less affected by personnel problems. Some businesses in this category face problems related to not working full time, lack of discipline, lowering the level of professionalism and personnel fluctuation.

Not working full time and employee absenteeism increase the share of unproductive work time, which leads to lower productivity and work efficiency. The cause of these negative symptoms can be entrepreneurs-managers who don't provide on time raw material and supplies necessary for the production, interruption of equipment functioning, which often has a higher degree of technical wear. Another cause for personnel problems is the lack of formalized procedures for structuring and organization of employees' work in SMEs.

Lowering the level of professionalism and the staff's unwillingness to continuously improve is a problem of SMEs. This is explained by the lack of the career development possibility in small businesses. Employees self-perfect when it is necessary to demonstrate some performing professional knowledge for a higher hierarchical position. Respectively, entrepreneurs-managers must seek ways to motivate the personnel that would require continuous professional training; otherwise, enterprises may not meet the business requirements and occupy less favorable positions compared to the main competitors.

In the local analyzed entities, personnel problems, with organizational and motivational character, are determined both in young enterprises, as well as in those with experience. Accordingly, we conclude that the causes of these problems are entrepreneurs-managers who do not have skills and organizational capabilities to motivate personnel in the early stages of the activity and do not develop them even in mature stages.

However, following the share of problems regarding personnel in enterprises with different business periods, we observe the percentage increase of all types of personnel problems, except absenteeism in enterprises with over 10 years experience. So, the problems initially ignored by entrepreneurs-managers can become obstacles in the future business development.
The financial function includes the activities through which are achieved the objectives on obtaining and effective use of financial resources necessary for a normal activity.

Table no. 2: Sources of financing the activity of the entity (%)

<table>
<thead>
<tr>
<th>Sources of financing the activity</th>
<th>Total</th>
<th>Enterprises’ dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>micro</td>
</tr>
<tr>
<td>Equity</td>
<td>66,7</td>
<td>37,7</td>
</tr>
<tr>
<td>Loans from domestic banks</td>
<td>35,2</td>
<td>14,1</td>
</tr>
<tr>
<td>Credit lines</td>
<td>12,2</td>
<td>6,1</td>
</tr>
<tr>
<td>Capital investments</td>
<td>7,1</td>
<td>1,8</td>
</tr>
<tr>
<td>Investment funds</td>
<td>3,6</td>
<td>0,9</td>
</tr>
<tr>
<td>Friends/families</td>
<td>25,5</td>
<td>14,1</td>
</tr>
<tr>
<td>Leasing</td>
<td>1,8</td>
<td>-</td>
</tr>
<tr>
<td>Subsidies</td>
<td>1,8</td>
<td>1,8</td>
</tr>
<tr>
<td>Advance from customers</td>
<td>15,8</td>
<td>5,3</td>
</tr>
<tr>
<td>Grants</td>
<td>1,8</td>
<td>-</td>
</tr>
<tr>
<td>Non-responses</td>
<td>1,8</td>
<td>1,8</td>
</tr>
</tbody>
</table>

The results obtained from the survey show that 66.7% of enterprises have used their own funds to finance activities, the largest share returned to micro enterprises (37.7%) and small enterprises (22.8%). To bank loans resorted only 14.1% of the micro enterprises and 13.2% of small enterprises.

Most medium-sized enterprises, in order to provide the necessary financial means, have resorted to various sources of external financing. The creditors' confidence in full and timely repayment of borrowed resources for medium enterprises is incomparable with the confidence in small and, particularly, the micro enterprises, which face difficulties in attracting external financial resources because of the low patrimonial value and often the lack of collateral.

Advances from customers are a way of attracting financial resources to ensure the production process. From the data presented in the table, we see that micro enterprises and small enterprises resort more frequently to advance from customers, compared to medium enterprises.
Besides attracting external financial resources for free, which represents advances from customers, SMEs ensure against the refusal of orders. That is, with pre-payment, the producing enterprise is confident that the customer will buy the ordered goods.

Analyzing the reasons of not resorting to bank loans on types of enterprises, we determine that SMEs face barriers in attracting bank loans. The high interest rate has been a barrier in attracting bank loans for 30.0% of micro enterprises and 14.3% of small enterprises, participating in the survey.

**Conclusion**

The main sources of learning, for business management, are learning-doing, self learning and experience gained from previous work, which shows that the management practiced in most SMEs, has an empirical character, based on the learning-doing experience, that experience from own mistakes and failures. The lack of entrepreneurial training in management can be a serious obstacle in maintaining positions and expanding the business, when there are strong competitors on the market.

Business owners, who intend to delegate the management of the entire activity to third parties, employ as general managers holders of higher education diplomas in the area in which the company activates. Respectively, the prevalent skills in this group of managers will be the technical ones, not the conceptual skills as recommended by the management theory. In this case, managers will not have the knowledge needed to develop and improve the management elements and processes, arising from internal and external environment conditions.

Analyzing the planning horizons undertaken by SMEs in different periods, we find that young firms ignore the strategic and tactical planning, limiting more to operational planning. The passivity in planning strategies is a serious obstacle in the business development and evolution.

Operational planning is important for the current activity of companies, however, it involves stagnation, followed by the decline, if companies do not set strategic objectives and do not take measures to achieve them. Frequency and intensity with which control is achieved in SMEs reflects the active involvement of the entrepreneur-manager in the managed activity. However, the control's high frequency and the degree of intensity do not reduce problems of organization, discipline
and the common errors in employee activity. They have a large share, both, within young enterprises that operate on the market for 1-3 years, as well as in enterprises with longer activity. Given the type of personnel problems, we determine that they have predominantly an organizational character. The efforts made by entrepreneurs-managers to motivate employees, does not create a positive feedback from them. Regardless of the motivations applied, employees do not make effort to meet discipline rules, working time and qualitatively they don't meet the work tasks. Employees' professional immaturity can also be considered an essential obstacle in the development of small and medium business management, because of their role as production factors, through which the other organizational resources are capitalized and on which depends the success of structural, procedural and economic transformations.

**Acknowledgement**

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**Bibliography**


Innovation - a mean to recover the health system

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Abstract
The paper aims to present an aspect of the current situation of the Romanian health system, through the innovative aspects related and medical technologies used to treat patients. The research starts with a brief clarification of the term “innovations in services”, applied to the health system, followed by a statistical research of the current state of the investment in research and development. The research results reveal the situation of Romania, compared with other European countries, regarding the innovation system and the health system generally and shows possible solutions to improve the Romanian health system.

Keywords: innovation, health system, services

Introduction
Currently, by the development of telecommunications and Internet technologies has reached the phenomenon called flattering of the earth (Friedman, 2007), also appointed in a small way by P. Teillet, outsourcing of services by companies to reduce the added value of traditional industries to branches of service benefit. (Teillet, 1987) Regarding health services, through flattering of the earth, their productivity increased, average period of hospitalization was reduced, communication between different specialists in different countries is easier etc. For example, through telecommunications via satellite it establish various videoconferencing and any doctor can participate virtual in these activities without incurring travel and accommodation costs: in this way, the physician participating at these events, do not
miss from the hospital and so do not neglect the patients; by these possibilities, professional connections can be maintained easily and the doctors can be permanently informed regarding the news that appear in the health field.

On long-term, the health of population is directly related to the level of professional training of medical staff and the endowment of hospital with medical equipment and devices for the preparation and implementation of the medical act. *Investment in intellect* (Caspar, 1988) means that intelligence is a positive and rational *tool* which includes skills, studies and analyzes, simultaneously; intelligence is also *imagination and intuition, i.e. the ability to focus in a whole unique and essential thought.* (Caspar, 1988)

**Material and Methods**

The research method used is the comparative method, through which we highlight specific aspects of innovations in medicine, the national governments decisions impact on long-term development of the health system and the importance of research and development expenditure spented for innovative technologies.

**Literature review**

The first researches in innovations were launched for industrial activities focused on technological innovation of product and processes (Djellal, Gallouj, 2002: 105-106). In terms of services, the unstable nature of the results (product) is an analytical problem, because this product is an act, a treatment protocol, formula, process or organizational way (Mustar, Penan, 2003: 112). Examples of product and process innovation often encountered in industrial activities, can be found in the case of health care: preventive medicine and screening techniques (Djellal, Gallouj, 2002: 118).

*Innovation in services is not limited to technological progress. May be concerned about a new insurance contract, new financial instruments, a new area of legal expertise, a new formula of restoration, distribution and hospitality, a new concept of leisure* (Gallouj, 2004). At these examples, we add the idea that innovations in health can include a revolutionary new treatment, a new method of operation or a new method of diagnosing various diseases.

The term *medical innovation is used as a generic term for various types (tangible and intangible) of technological and bio-
Innovations in the health care field (Djellal, Gallouj, 2005). This type of innovation diffusion depends on several factors: existence of specialist teams at different periods of training, the way this innovation is accepted among the population and the medical staff, standards imposed by governments and even by the price system. Medical innovation impact is felt on the quality of health, productivity, work organization, health expenditures, externalities and others.

Regarding the terminological clarification in health services, based on the literature review we highlight seven forms of innovation in this area, such as:

Innovation in an organized process is a change focused on new products, processes and methods of organizational models, wearing of wide variety of forms, such as: i) at the level of organization (improving working methods, hierarchy and division of tasks, information systems); ii) at the level of process (improvement of material and immaterial resources allocated to the production); iii) at the level of product (creating a new product or improving an existing product) (Bellon, 2002: 223). Radical innovation is a technological change in the economy or in the private entity (Bellon, 2002: 224). Improvement innovation having the aim to improve the quality of certain features, without altering the structure of the system. Incremental innovation describes the suppression or substitution of features without altering the general structure. Ad hoc innovation is common in knowledge-intensive activities and represents a solution, with a certain degree of novelty, of legal, organizational, strategic, technical issues etc., contributing, in terms of the provider, to generate new knowledge and skills (Mustar, Penan, 2003: 119). Innovation through recombination is achieved through basic principles of dissociation and association of the final and technical characteristics (Mustar, Penan, 2003: 120). Innovation by formalizing represents a heterogeneous mechanisms which can be realized through two types of ways that can be combined, such as: i) tangible mechanisms (introduction of technical systems in the service activity, i.e., computers and computer systems), and ii) intangible mechanisms (introduction of methods in the service activity) (Mustar, Penan, 2003: 120).

The hospital can be described as a genuine innovation, which defines several types of innovation, such as: i) social innovation (development of training schemes for medical staff), ii) technological innovation (IT equipment, biotechnology), iii) organizational innovation
(administrative reorganization, evaluation of the quality of care, working time organization), and iv) service innovations, in terms of hospitals working methods change, by introducing new activities (ambulatory services, health and social services) and by developing collaboration between doctors and voluntary organizations. (Anatole-Touzet, Souffir, 1996)

Results and Discussion

Assuming that innovation is in principle beneficial, at the level of the entities concerned (innovative), but also at the social level, nevertheless, certain renewals („reforms”) can be destructive for short, long and very long term, we want to show how the research and development expenditure reflect certain political and economic decisions of the national governments.

Tabel nr.1. Research and development expenditure (% of GDP) between 2000-2009 in some European countries and in the USA

<table>
<thead>
<tr>
<th>Country name</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>2.71</td>
<td>2.72</td>
<td>2.62</td>
<td>2.61</td>
<td>2.54</td>
<td>2.57</td>
<td>2.61</td>
<td>2.67</td>
<td>2.79</td>
<td>-</td>
</tr>
<tr>
<td>Average EU</td>
<td>1.80</td>
<td>1.86</td>
<td>1.83</td>
<td>1.86</td>
<td>1.83</td>
<td>1.82</td>
<td>1.85</td>
<td>1.85</td>
<td>1.95</td>
<td>2.04</td>
</tr>
<tr>
<td>Belgium</td>
<td>1.97</td>
<td>2.07</td>
<td>1.94</td>
<td>1.88</td>
<td>1.86</td>
<td>1.83</td>
<td>1.86</td>
<td>1.90</td>
<td>1.96</td>
<td>1.96</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>0.51</td>
<td>0.46</td>
<td>0.48</td>
<td>0.48</td>
<td>0.49</td>
<td>0.46</td>
<td>0.46</td>
<td>0.45</td>
<td>0.47</td>
<td>0.53</td>
</tr>
<tr>
<td>France</td>
<td>2.15</td>
<td>2.20</td>
<td>2.24</td>
<td>2.18</td>
<td>2.15</td>
<td>2.11</td>
<td>2.11</td>
<td>2.08</td>
<td>2.12</td>
<td>2.23</td>
</tr>
<tr>
<td>Germany</td>
<td>2.45</td>
<td>2.46</td>
<td>2.49</td>
<td>2.52</td>
<td>2.49</td>
<td>2.48</td>
<td>2.53</td>
<td>2.53</td>
<td>2.68</td>
<td>2.82</td>
</tr>
<tr>
<td>Italy</td>
<td>1.05</td>
<td>1.09</td>
<td>1.13</td>
<td>1.10</td>
<td>1.10</td>
<td>1.09</td>
<td>1.13</td>
<td>1.18</td>
<td>1.23</td>
<td>1.27</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>1.65</td>
<td>-</td>
<td>-</td>
<td>1.65</td>
<td>1.63</td>
<td>1.56</td>
<td>1.66</td>
<td>1.58</td>
<td>1.56</td>
<td>1.68</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1.82</td>
<td>1.80</td>
<td>1.72</td>
<td>1.92</td>
<td>1.93</td>
<td>1.90</td>
<td>1.88</td>
<td>1.81</td>
<td>1.76</td>
<td>1.84</td>
</tr>
<tr>
<td>Romania</td>
<td>0.37</td>
<td>0.39</td>
<td>0.38</td>
<td>0.39</td>
<td>0.39</td>
<td>0.41</td>
<td>0.45</td>
<td>0.53</td>
<td>0.59</td>
<td>0.48</td>
</tr>
<tr>
<td>Hungary</td>
<td>0.78</td>
<td>0.92</td>
<td>0.99</td>
<td>0.93</td>
<td>0.88</td>
<td>0.94</td>
<td>1.00</td>
<td>0.97</td>
<td>0.99</td>
<td>1.15</td>
</tr>
</tbody>
</table>

Expenditures for research and development are current and capital expenditures (both public and private) on creative work undertaken systematically use to increase knowledge of humanity, culture and society. In our analysis we have chosen the countries listed in Table nr. 1 because the United States has high medical innovation, and for the EU we have chose the EU’s founding countries (France, Germany, Italy, Luxembourg, Netherlands and Belgium) and Romania, Hungary and Bulgaria (developing countries with high potential to absorb new technologies).

The developed countries have a modern health system (modernity refers to equipment: buildings, filing systems and other technical aspect) (i.e., United States, France, Germany, Netherlands etc.). The health system in the developing countries (Bulgaria, Romania and Hungary) is a transition one to a modern healthcare system (due to the entry in force on the national markets of new medical innovations). For example, Romania before 1989 had a health system with organizational problems (insufficient financial and material resources, unable to purchase drugs from abroad, low wages and improper working conditions for medical staff etc.), issues that are also reflected today, by multiple ad hoc political decisions taken without debate in the legislative. However, the trend of modernizing the health system exist, with reference to local medical market penetration of various techniques and modern surgical procedures, drugs and new medical equipments, with direct effect on the recovery of the health of people.

In recent decades, in the American hospitals, it was found that responsibilities and work of the administrative staff and nurses increased, developing the new career opportunities, reflected in the increasing need for collaboration between specialists and technicians to perform operations and maintenance technical equipment (Stanback, 1987). As we see in table nr. 1, the USA granted a rated high of percentage of GDP for the R&D, while the EU average is close to the United States. Founding countries of the EU allocates a high percentage of GDP for the R&D, and developing countries analyzed accorded a rate below the EU average.

Unfortunately, in Romania and in other developing countries (in table nr. 1, Bulgaria and Hungary), R&D sector and health sector are not adequately funded, as these sectors are underdeveloped, creating of new technology is almost non-existent. However, in terms of diffusion of innovations and new technologies, the situation in Romania is not
worrying, because our country is a market with rather high potential to absorb technological innovations, which leads to the fact that sick people have access to treatment and laser surgery, specialized tomography and other revolutionary methods of diagnosis and treatment. The situation became alarming since, in recent years, most young people working in the medical field (and not only) became involved in personal desire to learn and use new medical technologies, this effort being required to build a successful career (unfortunately, most young people in developing countries are more concerned about their own welfare than about the welfare of the community they belong; this leads to the situation where they live the country attracted by higher wages in developed countries, and acute diseases affecting population of origin are untreated).

**Figure nr. 1.**

![Gross domestic expenditure on R&D (GERD)](image)


The developing countries has a high potential to absorb innovative medical news; governments of these countries should give up the implementation of political decisions with contradictory and destructive effects on the economy; also would be required to support actively the cooperation between the private and public sectors by foundation public-private partnerships in innovation. It would be necessary to support the cooperation between foreign specialists
Innovation – a mean to recover the health system

(evenlty with specialists from developed countries where R&D occupies a leading position in implementing political and economic decisions of national governments) and specialists from the developing countries. For example, in Romania, a private clinic (specialized in various eye surgeries) supports the collaboration between the Romanian doctors and the Italian technicians for the implementation and development of various surgical procedures; thus, this segment of the Romanian patients may benefit of high quality of health services.

New technologies developed over time have a positive impact on medical field, both by the appearance of a multitude of processes, methods of operation, treatments, drugs, devices and medical equipments, which lead to the development of health services, increase their productivity and the possibility of maintaining relations between different experts.

Modern medicine through innovations can ensure the way for a consistent reach of the balance between human body and the environment (the relationship with divinity, environment, health and social system) and, simultaneously, it should be noted a positive impact on the socio-economic life (for example, most people probably sick at a certain time noted in the recovery period that positive or negative mental state influenced for better or worse the speed and intensity of the post-operative treatment effects. In our country, a strong emphasis is placed on the relationship between individual and divinity; such notice the existence of priests in hospital units that are designed to strengthen the spiritual bond and to induce wellbeing of the patients hospitalized).

**Conclusion**

Development actions in the medical field should be seen both by politicians and by the civil society, as long-term investments, able to maintain health and increase chances for development and better conditions for the future. These types of investments represents a high percentage of GDP in developed countries, where the research (both in the medical field and in other areas) are well developed, hence the fact that these countries allocate a percentage of GDP increasingly higher for the R&D.

Many Romanian doctors are drawn to the developed countries, because in those countries incomes and life conditions are incomparably higher; that is a disadvantage for Romania which incurred the costs of their education and the local population does not benefit from the
Romanian doctors knowledge and skills. Romanian doctor’s migration can be limited through programs designed by national government, through which to pursue the granting of decent wages and adequate working conditions, including ensuring a high standard of living in our country.

Innovation in intellect in Romania compared with other European Union countries is low. In terms of management, the situation has often destructive tendencies (dissolution of hospitals, leaving whole areas without nearby medical facilities etc.). New medical technologies are long-term material investments in the health system. Knowledge in health services is a long-term intellectual investment, provided by human resources and the university education system.

The Romanian Ministry of Health has not presented viable measures for the stimulation of the medical research. Thus, in the short term, government efforts should focus on attracting European funds for: i) stimulating medical research and ii) helping small and medium-sized hospitals (remaining after dissolution) to purchase medical equipment.

Acknowledgements
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Some Aspects of Transforming Education in the Information Society (case of economical study)

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Abstract
The present study examines the modifying of some educational canons aspects in the age of information society. First of all we referred at the role and place of the professor in the study process. We are examining the modifying value of main components of conventional forms of teaching: textbook, lectures, essays. The involvements of informational pressure into the educational performance get some secondary negative effects, such as plagiarism.

Keywords: canons of education, informational pressure, plagiarism

Introduction
The rapid and fundamental changes imposed on society and on the economy by the new information paradigm, obviously have repercussions on education as well. Unlimited access to information for scholastic purposes deteriorates the dominant position of the teacher, transforming him in a participant to the learning process. This new role requests new demands, such as an increased capacity to moderate in obtaining and acknowledgment of information by students. The array of internet skills, by their easiness of access, creates a false feeling of ease in terms of study information. As it is mentioned (Scott, 2001) “Thus, conversation is not the exchange of knowledge, but the process of becoming informed about each other’s ‘informing’ (what Pask described
as the “coordination of coordinations of coordinations”).”¹ The basic task of the teacher is the ability to externalize understanding and, as a consequence, the development of application abilities and the continuation of new knowledge gains. Also, with the increased possibility of multiplication of materials, there is an increased possibility of plagiarism. This phenomenon, all vicious traits aside, has a negative effect on the learning process by creating the possibility of study reproduction without comprehending its essence.

**Material and Methods**

In our research an attempt was made to comprehend the issues imposed on the educational system by the new information society. By using our own experience as a teacher, we are able to rethink the efficiency of traditional learning tools: the book, the class and student’s work outside of the class.

**Literature review**

The issue which has been constantly put in front of the educational system is more pregnant in the new age: to account for requirements, always in development and conditions imposed by the change of the technological level of the external environment. The educational theorist John Dewey claimed: “Not only is social life identical with communication, but all communication (and hence all genuine social life) is educative.” To be a recipient of a communication is to have an enlarged and changed experience. One shares in what another has thought and felt and in so far, meagerly or amply, has his own attitude modified. Nor is the one who communicates left unaffected. … Except in dealing with common places and catch phrases one has to assimilate, imaginatively, something of another's experience in order to tell him intelligently of one's own experience. … It may fairly be said therefore, that any social arrangement that remains vitally social or vitally shared, is educative to those who participate in it. (Dewey, 1916). If we are to compare with the ideas exposed by contemporary researchers, we understand that the adequacy of education to contemporary requirements do not lose their importance.

“Every era of technology has, to some extent, formed education in its own image. That is not to argue for the technological determinism of education, but rather that there is a mutually productive convergence between main technological influences on a culture and the contemporary educational theories and practices. Thus, in the era of mass print literacy, the textbook was the medium of instruction, and a prime goal of the education system was effective transmission of the canons of scholarship. During the computer era of the past fifty years, education has been re-conceptualised around the construction of knowledge through information processing, modelling and interaction. Now, as we enter a new world of global digital communication, it is no surprise that there is a growing interest in the relations between mobile technology and learning. What we lack, however, is an innovative and enhancing educational framework for the mobile age.”

Laurillard, D. (1993) and Phillips, R. (2005) tackle the issue of change, which intervene in the way the teacher teaches and the main transmission instruments for knowledge gain. M.D. Merrill (2002) proposes five principles of learning, which become actually important. These are the following:

1. Learning is promoted when learners are engaged in solving real-world problems;
2. Learning is promoted when existing knowledge is activated as a foundation for new knowledge;
3. Learning is promoted when new knowledge is demonstrated to the learner;
4. Learning is promoted when new knowledge is applied by the learner;
5. Learning is promoted when new knowledge is integrated into the learner’s world.

The new informational age has aggravated an older issue of education – plagiarism. Thus, in many researches, for example (Maurer, H, 2006) mentions that: “We are living in the age of information technologies that despite of making our life easier also creates a set of problems. Availability of digital documents (for instance, easy access to the Web) and telecommunications in general open good chances for

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plagiarism prosperity turning cheating into extremely easy and engaging process. He stated that nowadays plagiarism has turned into a serious problem for publishers, researchers and educators”.

**Results and Discussion**

The contemporary information society, which manifests itself through the practically unlimited access to information, creates advantages as well as disadvantages for the educational system. The first issue which we wish to specify is the danger of substitution of substance (conscious comprehension) of the material with the simple familiarization of others’ knowledge on one field or another. Traditional learning methods: books and class papers; even class lectures; essays made as reports, projects, case studies – diminish their value. Books are considered by students to be archaic and useless, being substituted by electronic class files. In many cases, Power Point presentations serve as class course supports and the teacher uses them in class. Lectures in their traditional form fail to reach their goal as well. The student considers that the teacher’s lecture can as easily be found on the Internet and does not bother to be present, let alone to focus on the presented material. Concerning essays – we have the same situation. Even the best of students rarely complicate themselves with elaborating an essay, preferring to borrow information from papers done by others. Of course, the Internet offers this possibility.

In such conditions, the primordial task of the teacher is: to create conditions in which the student will be helped and stimulated to enter the essence and laws of the studied phenomenon. Which, in our vision, are the instruments for the successful solving of the efficiency issue in education? We will concentrate ourselves on perfecting the ways of traditional learning.

**Books and lectures themselves.**

Practicing lectures and books, oriented toward passive learning become inefficient at this time. In my opinion, one must refuse this in terms of class studies, as well as concerning traditional courses, as both are unique and tackled in the following manner:

- The course support will be distributed to the students in advance;
- The presentation made by the professor will be focused on explaining the key ideas of the course;
• Certain themes from the course will be proposed for debates in small groups, of 2-3 individuals;
• In the second stage, groups will be increased in order to seek consensus in the exploitation of the phenomenon;
• Students which have proven the best improvements, will support their theses in front of the entire auditorium.
• In all proposed stages, the teacher has the role of a mediator and guide in the learning process. Also, the evaluations of success are being established.

**Essays**

Writing an essay, at the given time, transforms into a simple presentation of materials found on-line. As a result, the essay must be made on a research theme. It can consist of a concrete case study, which would compel the student to apply the methods learned in class in practice; or the debate on several contradictory approaches on the same phenomenon. For example, within the political economy of the informational economy, we have an approach which sustains the existence of specific traits, which require the building of a radical new theory. Also, we have papers (such as “Rethinking the Networked Economy: The True Forces Driving the Digital Marketplace”. By Stan Liebowitz), which denies the necessity of a radical new theory. The essay must contain a plausible analysis of the student on several concrete details, whose tackling is overlapped by researchers.

**Plagiarism.** The term “plagiarism” comes from the Latin “plagiarius” which means child thief. In an attempt to define plagiarism we present its forms:
- Copying texts or ideas from someone without making a reference;
- Copying texts ad-literam, without putting the text in brackets;
- Referring to another source than the original;
- The presentation of the text of another author by its exposure into his own words, without mentioning the priority of the first author;
- The massive usage of the work of another author (it does not matter if with or without reference) that a paper says nothing new to the field it researches.
- The translation of the original text, without making a reference.
Plagiarism, aside from its moral and judicial implications, is a threat to the quality of all the stages of the university educational system. It makes the mind lazy and allows its user to obtain undeserved educational marks. Plagiarism, practiced by students, has several specific forms, such as: purchasing the paper online from a site or from a firm specialized in writing papers; the presentation in own words of the material from several sources, indicating other references than the originals; copying colleagues papers and presenting them as your own.

The plagiarism phenomenon can be countered by a corresponding formulation of working themes, which requires an author’s own analysis, as well as explaining its disadvantages.

**Conclusion**

The involvement of environmental pressure into the education results in significant changes in methodological approach to learning. Traditional methods of learning must be modified in the direction of adapting to new conditions. The ideas brought forth in the paper will probably serve for the increased efficiency of the educational process.

**Bibliography**


Economical Freedom and the Rule of Law in the Conception of Milton Friedman

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Abstract
For some decades, Milton Friedman’s name is associated with economical neo-liberalism and the monetarist theory, his ideas continuing to be the object of debate among theoreticians from the most diversified fields. This article analyzes in its first part the controversies connected to the economical freedom’s possibility of ensuring the existence and functioning of individual freedom and political freedom, as he says. The second part discusses the means in which the freedom of choice is influenced by the mechanisms of market economy, by the system of political organization of the society and by the means of intervention of the state in the social economic market. The third part focuses upon the highlights that define the monetary program and the solutions it proposes for the functioning of economy in its entirety.

Keywords: Friedman, economical liberalism, rule of law, individual liberty, monetarist theory.

Introduction
A renowned theoretician in the field of economic science, Milton Friedman has important contributions in highly diversified fields: from the methodology of the economical science to the theoretical and practical aspects of monetarism, from the critique of dirigistic policies to the argumentation of the need of market economy,
from the philosophical issues of economic and political freedom to the
theory of consumer sovereignty and the practical measures it involves.

The accurate understanding of his work involves reporting it to
the social, political and economical context market by the economic
dirigisme promoted by J. M. Keynes, by the ideas of the neo-liberalism
theorized by the Economics School of Chicago, by the dynamic of the
relations between the State and the economy, but also by the new
solutions that involved the analysis of the consumption and the
complexity of the policies of economic stability.

By trying the demarcation of these topics, I'll systematize the
intellectual course led by M. Friedman from the assumptions of
liberalism to the reformulation of the theory on the relation between
economic and political freedom, in close connection with its project on
consumer sovereignty and the main joints of the monetarist program. In
this respect, I'll relate first to the ideas which have made a "career" in
economic theory, ideas formulated by the author in the work "Capitalism and freedom".

**Why is economic freedom a condition for political freedom?**

A first problem discussed by Friedman in the work referred to
above is that of the political mechanisms that help maintain dirigisme in
American economy, as well as the individual and social consequences
of practices associated with dirigisme. As a result of his analyses, the
author finds that the persistence of dirigisme is due to a so-called "iron
triangle" composed of the pressure groups which require the state’s
intervention in the economy, the groups of politicians that represent
their interests in the power structures and the groups which make up the
state bureaucracy, all of these groups constituting themselves in
beneficiaries of dirigisme policies.

Contrary to a simplistic approach, he advances the hypothesis
that, no matter how well the market economy would operate, this does
not eliminate the need of the governing system, complete freedom only
being possible in an ideal world. In these conditions, the problem asked
by Friedman is structured around the following themes: what are the
legitimate functions of the institutions of government, where is the limit
of justification for their intervention in economic and social life, which
are the grounds that may be invoked in the support of this operation, if
there is any connection between economic and political freedom and if
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there is, how is it possible that economic freedom contributes to the political freedom.

According to his scale of analysis, the political or individual as he calls it, is a social value that deserves to be promoted, and the economical freedom, whose institutional model is the market economy, is a necessary condition of political freedom. In support of this thesis, the author announces two sets of arguments: a normative and an instrumental one. The normative argument claims that freedom in economic organization is a component of freedom understood in a general sense and that the individual freedom must be regarded in a close relationship with all specific freedoms (economic, political, social etc.). Therefore, if freedom in the general sense represents something valuable, then specific freedoms are the modern carriers of the same values, making them worthy of being promoted by society.

The instrumental argument envisaged that economic freedom is a necessary condition, even if not sufficient, of political freedom, and that a certain level of economic freedom can guarantee a certain political freedom. According to Friedman, "political freedom means that lack of constraint exercised on person by his fellow", and the main threat to freedom "is constituted by the power of coercion, whether this power lies in the hands of a monarch, a dictator, the oligarchy or a temporary majority" (1995, p. 29). This leads to two conditions that must be met so that political freedom can be preserved, both of which being referred to as that general principles of the constitutional system: the first principle enshrines the requirement that the action sphere of the government is strictly limited; the second principle maintains that governmental power should have a certain territorial dispersion.

In accordance with the first principle, the basic function of the structures of government must be "protecting our liberties, protecting it from her enemies outside the borders, as well as from appointed citizens: protecting the law and order; the power in the application of contracts private; the creation of competitive markets. Beyond this the major function, says Friedman, in some instances, the government can organize up properly to meet in common what would be more difficult and more expensive to fulfill individually" (1995, p. 16).

By virtue of the second principle, governmental power must be exercised rather at the regional and local level; the argument invoked being the following: while no producer can get to control all of the market of a product, for example, a leader or a political party can get, at
a given moment, to control society as a whole. Friedman concludes that, if economic power will be in other hands than the political power, then the market eliminates the source of coercive power. In addition, not only that: the possibility to choose between the offer the services of "more" competing governments is equivalent to that of an instrument of public control over the activity of governing itself.

Once approved, the government can receive an established system of attributions, the more so as there are a number of desirable things that can be secured on purely economical ways, leading therefore to a need of political decisions. The disadvantage of the political means lies in the fact that they require a confirmation from the all the participants in the social game, and for this reason it is desirable that these ways be used only for solving those problems that do not involve conflicts of values or social coercion.

According to Friedman’s criteria, the role of the government in a free society concerns three major directions of action. In the first place, the government is called "to maintain law and order, to define the rights of property and the other rules of the economical game, to settle disputes with respect to the interpretation of rules, to require the execution of the contracts, to promote competition, and to provide a monetary framework...", as well as the specific procedures for the resolution of conflicts arising out of human rights" (1995, p. 50). Secondly, the system of government should mediate the action of the community in cases involving technical monopolies and the effects resulting from the imperfections in the operation of the market economy. Thirdly, the grounds that may justify government intervention refer to a set of measures of the paternalist type designed to protect the family, the children, and the educational system, the social assistance of persons in difficulty and the social protection of the elderly.

Friedman found that one of the political issues faced by contemporary societies is that the governing system creates a much larger share of actions than could be justified by the arguments referred to. So, one of recurring themes in western societies is the belief that the distribution of wealth resulting from the interaction of the agents on the competitive market should be "corrected". Whether it is the fact that building up wealth is the result of chance or favorable circumstance, or the result of natural talents, of personal merits or bequests, the persons who have acquired wealth in this way have moral duty to offer part of it to those less favored by chance. The corollary of this “equalitarian”
feeling consists in the tendency to use the government as a tool to achieve the redistribution of income between the members of society.

The question asked by Friedman is, if it has the legitimacy to act for redistribution in the name of ethical principles, which claim that each person is entitled to obtain in relation to what he produces with means that he possesses. By studying the effects of the measures of redistribution, the author comes to the conclusion that they have led rather to the unequal retributions before the payment of taxes, they have stimulated tax evasion and the emergence of 'legal gates' of avoiding taxes, leading even to phenomena of the circumvention of taxation, whose social consequences are not hard to anticipate.

With this last remark I will move on to the discussions on his views of Milton and Rose Friedman regarding the freedom of individuals to manage their community, social, political, economic, etc. relations and the values involved by the freedom to choose.

**The freedom to choose and the effects of interventionism**

On the line of the arguments presented in the previous section, Friedman states that economic freedom permits people to cooperate without constraints or leadership from the center, where he sees a source of tyranny. He considers that the impulse of economic activities starts from the consumers, through their capacity to choose the merchandise they will buy from the ones offered by the producers. In other words, the market witnesses the sovereignty of the consumer, because his option constitutes an essential signal for the producers. The latter will allocate their resources to satisfy the consumers’ option, which permits them to use their resources rationally and to increase their economic efficiency.

After Friedman, the key feature of this mechanism is the prices, whose functions are:

- They transmit information not only from the buyer to the producers and owners of the resources, but also the other way around, in any situation which deforms the free expression of demand and offer.
- They create the motivation to act not only regarding the demand for products, but also for the adoption of production methods which are less costly and which use the available resources for the aims with the highest value.
- They determine the distribution of the income, regarding each of the participants to the given economic process according to the
contribution brought, the physical and intellectual capacities or the choice made for the use of possibilities owned by each of them.

According to his reasoning, economic freedom means the possibility to use the income, that is “how much we spend for ourselves and what; how much we save and under what form, how much we give and to whom” (2009, p.53), the freedom to use the chances we have according to our own value criteria, as well as the freedom of property.

Friedman associates market economy with private property and its judicial affirmation in the legislative system of the country, but also with the state’s un-intervention in the price mechanism and the existence of a stable monetary system.

Although he accepts some forms of intervention of the state especially at the macro-economical level, he is against the budgetary subventions given to the industry and agriculture, the increase of taxes on wealth and the budgetary deficiencies, as well as against what one calls “the state of general welfare” (Welfare State).

In the analysis done to the "welfare state," Friedman notes that, despite its humanitarian objectives, the proposed programs for this purpose have not been met. "At the beginning of the new era, he writes, all seemed perfect. The beneficiaries were fewer; taxpayers that were to finance them were many - so each had to pay a small sum sufficient for the few that still needed it. As the welfare programs have expanded, the balance has changed. Nowadays, all of us take out of a pocket to put into another, money - or something that can be achieved with money" (2009, p.94).

In order to support his ideas, Friedman uses the diagram below, in which four possibilities to spend one's own money and those of the taxpayers are brought together.

<table>
<thead>
<tr>
<th>Whose money?</th>
<th>To whose use?</th>
</tr>
</thead>
<tbody>
<tr>
<td>One’s own money</td>
<td>I</td>
</tr>
<tr>
<td>Someone else’s</td>
<td>III</td>
</tr>
<tr>
<td>One’s own</td>
<td>II</td>
</tr>
<tr>
<td></td>
<td>IV</td>
</tr>
</tbody>
</table>

According to this scheme, Class I refers to the situation of spending their own money, which assumes that there is every reason to save money and obtain the highest value possible for every dollar spent. Category II suggests the situation where their money is spent for the benefit of others, in which there is reason to make savings, but not
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necessarily to get the best merchandise from the recipient's point of view. Category III refers to the situation where someone else's money is spent in oneself, in which there is every reason to buy the best things money. Finally, the fourth category refers to the fact that one's money is spent for the benefit of a third party, in which there is no reason for saving, but rather the temptation of the waste and corrupting those involved.

Friedman's conclusion is that, the idea of "welfare state" contains major errors; for their elimination he called for "the reformation of the current system by replacing its numerous assistance programs with a comprehensive program of extra income in cash - a negative income tax charge related to the positive tax on income" (2009, p.98).

The central idea that preoccupies Friedman is expressed in the following terms: "Waste is painful, but it is the least of the evils of paterniste programs that have developed to such a great extent. The greatest evil is the effect that it has on the structure of our society. They weaken the family, reduce the work motivation, the savings and the innovation, they reduce the capital accumulation, they reduce our freedom" (2009. p. 103).

In his work, Friedman brings a series of correctives to the macroeconomic analysis and the function of the global consumption theorized by Keynes, introducing the concept of "permanent income". The thesis he starts from is that the people’s options for usage are always influenced by two elements: the level and dynamics of the present income, the permanent income or estimates of the individuals regarding the sustainable income that they expect on the long term. On this basis, he pursued the cycle of the consumption and savings functions, noting important differences in the behavior of different groups or social categories.

The monetarist program as a theory and economic proetics

Friedman's fundamental contribution concerns the development of the monetary theory and the study of the complexity of the policies of economic stability for which he was awarded the Nobel Prize in 1976. In his argument, the author used the quantitative theory of money and prices and from the equation of transactions formulated by Irving Fisher (1907), which has the form \( MV = PY \), where \( M \) is the nominal quantity of money, \( P \) is the general price level, \( Y \) is the volume of
transactions that occur in a given period, V is the speed of rotation of money, MV is the money supply, and PY the demand for money.

In the case where V tends to remain constant on the short term, then \( M = PY \) and \( Y = M / P \), which means that the purchasing power of money is directly proportional to the monetary mass and inversely proportional to the price level. Friedman advances the thesis that a change in the money supply is followed by a variety in the same sense of the producer prices and incomes. The conclusion reached is that the fluctuations in the global demand will be determined only by mass changes and/or by the rotation speed of the money, and the fluctuations in the money supply will be correlated with the relative flexibility of wages and prices.

Considering the particular area from the market economy as relatively stable, namely, that the speed of rotation of money is stable, Friedman theorizes the idea that the fluctuations in the nominal value of GNP is due mainly to the change in the volume of money (money supply) as a result of monetary policy and other exogenous factors such as: fluctuations in the gold-exchange standard, the changes in the financial policy, the cycle of political life etc.

In light of this view, he considers that the inflation is a monetary phenomenon occurred due to the fact that the issuing bank launched more money than is necessary on the market based on production volume and price, determined to do this by the practice of the budgetary deficits that characterize the dirigiste policy. M. Friedman believes that the main danger for the determining of economy is the increase in the inflation, for which reason he supports the need for the macroeconomic monetary policy, where he sees a balancing and stimulating factor of efficiency and economic growth.

It is important to note that Friedman's policy and the followers of monetarism represents controlling the inflation and ensuring price stability, appreciating unemployment not only justified, but also economically useful. In relation to this final point, Friedman proposes the concept of "natural rate of unemployment" in the sense that, up to a certain point, unemployment is the natural consequence of the functioning of market economy, with very positive influence upon it.

In order to prevent the discretionary measures of the state in the field of political economy, Friedman and other theorists of monetarism are concerned with upholding the generally valid rule to increase the annual money supply at a fixed rate of 3-5% since this would be
approximately, the annual growth rate of the GNP. In supporting this option, two principle ideas are presented:

- By its nature, the market economy based on private property is stable even without government intervention, and the shocks that may occur within it can be quickly corrected through the relative flexibility of prices and wages.

- The state’s economic policy measures are taken in its own interest, and not in the general interest, thus leading to economic crises and cycles, phenomena to whose amplification can also contribute and changes in the monetary policy of the state.

Other ideas regarding the content of the monetarist program content could be summarized in the following statements:

- The money offer is an independent measure as opposed to production, the volume of the monetary mass and the evolution of the money supply, being determined by the monetary authorities. Increasing the money supply is the sole source of funding the extra government spending and the programs of full use of the workforce market.

- The inflation occurs when the monetary mass increases faster than the output (the goods and services offered for sale) and the more rapid the growth of monetary mass per unit of output is, the higher the inflation rate is.

- While the output (the production and supply of goods and services) are limited by the physical and human resources available, as well as by the improvements to the processes of knowledge and skills to use them, the amount of money may increase at any rate, which strengthens the assertion according to which the inflation is primarily a monetary phenomenon.

- There is no necessary relationship between the evolution of money and prices on the one hand and the unemployment rate on the other. In the conditions of the increasing rate of monetary expansion, unemployment can be reduced temporarily, but the inflation increases permanently. The only cure for inflation is a lower growth rate of the increase of the monetary mass.

- By applying a sound monetary policy, public authorities can ensure the normal functioning of the economy. But the state and its financial institutions must control only the total weight of money in the economy, the correlations being left solely to the market mechanisms.

- Increasing the money supply in circulation at an annual rate of 3-5% in the short and long term 2-3% should be correlated with the
likely trends in production, population dynamics and labor, as with forecasts prices.

The idea that Friedman supports is that both in the monetary field and in other areas of the economic activity, the state must allow the free action of the market that adjusts by itself, and not take advantage of the privilege of issuing money to start a fictional policy of economical revival.

**Conclusions**

From the aspects above we can notice that, although Friedman criticizes government intervention in the economy, as it leads to privileges, favors corruption and contain threats to freedom, he is still less hostile towards Keynesianism, formulating even a new perspective on the role of the contemporary state. He considers, on the one hand, the fact that the economic policy can no longer be regarded as a set of measures decided by the government to regulate the economy, but it must be understood as a complex game between the economic and social actors based on relations of a contractual type. On the other hand, the state can no longer be seen as a substitute for the market, to intervene only in the cases of its failures or imperfections. Due to the fact that the market itself has become a powerful institution, its functioning presupposes the existence of an impartial force, such as the liberal state, which can guarantee the possibility that this institution called the market, could function efficiently.

Attached to the values of contemporary liberalism, the solutions proposed by Milton Friedman have generated the most controversial debates in the political, economical and social philosophy. Beyond these differences in ideas, his message is that, to identify the situations that endanger freedom and to seek ways in which these situations can be avoided are not meaningless steps enterprises, even if we are convinced that proposed solutions are neither final nor infallible.

**Bibliography**


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Quality assurance of the Teaching – Learning Process in the Financial Economic Analysis

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The Bucharest University of Economic Studies, Romania

Abstract
In the current context of economic development, human resources capable of long-life training and adaptable to economic change are essential elements of a model of growth based on competitiveness, efficiency and quality. In this paper we propose to identify strategies to improve the quality of the teaching learning process of Financial Economic Analysis in the Bucharest Academy of Economic Studies to the students in the first cycle of education - graduates cycle, the final year of study. Classroom observation is the qualitative method used to monitor the quality of the teaching learning process. As a complex process of instruments, classroom observation may take different forms and can play several roles.

Keywords: educational system, quality assurance, teaching learning process

Introduction
In a competitive computerized global economy, quality and inventiveness of human resources are the main factors underlying the essential differences between states. From Alfred Marshall's assertion „the most valuable of all capital is invested in the human being”, let us consider the quality of human resources in general and in particular the educational factor as a determinant one overall economic growth. Specialists in the field believe that it is a very close relationship between
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technological progress and investment in education, with implications for all the areas of life: economic, social, political, cultural.

The quality of educational services is a desirable social objective and its contribution to increasing efficiency defines the entire whole economy. We want to adapt our teaching style now, but especially in the future, through interactive teaching strategies with a pronounced active-participatory character of the students, opportunities for cooperation and effective learning.

Material and Methods

The objectives of this paper can be grouped as follows:

1. How can we improve the teaching-learning process of Financial Economic Analysis? Understanding and increasing knowledge of key economic and social aspects; stimulating the students' critical thinking in the identification and understanding of the economic phenomena; using the creative thinking of the students to analyze and synthesized the economic processes and phenomena; develop the students’ skills to explore and evaluate the action of critical economic factors on the studied phenomena; identifying the causes that influence the studied economic phenomena.

2. How do students perceive the quality of the teaching-learning process?

3. What can we realistically do to improve the current quality assurance system?

Investigative methods used to develop this theme can be grouped into: qualitative methods: social communication, Phenomenology, observations, interviews, induction and deduction; quantitative methods: descriptive, performance measures; mixed methods: explanatory, exploratory.

Literature review

Globalization and technological change have transformed knowledge into a determinant of competitiveness in the global economy and information revolution which is a guide through the fundamental processes of education in the 21st century.

The Romanian Agency for Quality Assurance in Higher Education (ARACIS) was founded in June 2006 in Romania, according to Law 87 on quality assurance in education, in order to monitor quality in higher education.
Why was such an agency necessary?

ARACIS was created to respond to the European requirements which stipulate that in 2010 it is necessary to create the European Higher Education Area and the European research area, which together constitute the space of European knowledge. Quality means: requirements, standards, procedures, inspection, quality assurance, organization, quality management, criteria, etc.; Quality - the extent to which a set of intrinsic characteristics meets/satisfies (SR EN ISO 9000:2001); Requirements - need or expectation, generally implied or obligatory (SR EN ISO 9000:2001).

The components of Quality Management (figure no. 1), are: Quality planning: setting goals, processes, resources; Quality control: meeting quality; Quality assurance: generating confidence in meeting quality requirements; Improving quality: increasing the capacity to meet quality requirements.

**Figure no. 1 - The components of Quality Management**

![Quality Management Diagram](image)

Quality of human resources is an overlapping of characteristics and properties owned by the people in an organization. In literature, quality sometimes refers to "utility", "fitness for use" or "compliance with the requirements" (S. Ciurea, N. Drăgulănescu, 1995). Gary Becker (1997) shows that investment in human capital, namely in education, training and medical care, has repercussions on the largest increases in labor productivity and therefore, an important contribution to GDP increase.

In recent years, in the Bucharest Academy of Economic Studies there was a series of major transformations that have helped to obtain the title of „University with a high degree of confidence”, according to
Quality assurance of the teaching-learning process

the external assessment of the academic activity quality carried out by
the ARACIS Council, in July 2008.

Which were the starting points?

Education Area; Bologna Declaration (1999): 6 targets with a view to
obtain compatibility/convergence among the higher education systems
of by 2010; Lisbon meeting (2000): "Between 2010-2020, Europe will
become the region with the most competitive economy in the world";
Salamanca Convention (2001): universities admit that their students
have need and demand qualifications that they can actually use after
their studies or are able to get hired throughout Europe; Berlin meeting
(2003): defining and implementing a national quality assurance system
in higher education; Bergen meeting (2005): set of recommendations.

What are the present trends?

The Bucharest Academy of Economic Studies is permanently
connected with the current changes, respectively: educational market
liberalization at the European level and in the world; recognition of the
graduates’ qualifications on the labor market; rapid insertion of
graduates on the labor market; higher education for everyone, etc.

This national study (Şerban C., Vasile C., Ciora C., 2010) is
based on concepts and a research experience worldwide implemented in
this area, but represents a pioneer study in Romania being the most
recent attempt to assess quality of academic performance throughout the
implementation of research grants of all types (national, international
and with businesses).

**Results and Discussion**

Classroom observation (Mureşan, L., 2007) is a key component
of quality assurance and human resources management, as well as of
training and development. As a complex process and tool, classroom
observation may take various forms and play multiple roles. In the
recent years, attention has been given to an increased use of observation
as a method of assessing the teaching activity in universities. Most of
the studies established the usefulness of observation aimed at assessing
the competence of teachers for institutions.

I have attended the courses and seminars taught by PhD.
university professor Claudia Elena Şerban at the Faculty of Accounting
and Information Management to the students from the third year, series
B (figure no. 2).
In the classroom observation was followed the teaching-learning process of Financial Economic Analysis (of the students of the Faculty of Management and Faculty of Agro-food and Environment Economics), the teacher-student ratio, student-teacher, teaching style, the type of communication, teamwork, achieving seminar objectives, etc.

**Figure no. 2 - Multiple perspectives on teaching-learning processes**

**Classroom Observation**

<table>
<thead>
<tr>
<th>Teacher: Raluca Florentina CREȚU</th>
<th>Date of Observation: Monday, February 16, 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observer: Valentina ROBU</td>
<td>Time of Observation: 09:00 - 10:20 a.m.</td>
</tr>
<tr>
<td>Activity: seminar</td>
<td>Discipline: Financial Economic Analysis</td>
</tr>
<tr>
<td>Students: 3rd years, group 151,</td>
<td>Faculty: Management</td>
</tr>
<tr>
<td>series B</td>
<td></td>
</tr>
</tbody>
</table>

Building and Room Number: Ion N. Angelescu, Room 0039

Attendance: 13 students attend the seminar, out of whom 9 have desktop computers and 4 students use the calculator from the mobile phone. Two students are coming with 5 minutes later.

Room Configuration: the seminar room is narrow, poorly lit, with 2 rows of desks, 2 students in each desk. Raluca stays at the
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teacher’s desk, facing the students, back to the board. The seminar room has got computers and video projector.

Comments/special circumstances: in the room there are 75% boys and 25% girls.

Agenda/Goals - Raluca aims to provide the students with the theme "Analysis of factorial turnover" according to the course schedule and the seminar objectives. She planned 4 objectives. To achieve these objectives, Raluca announces that the students will work in 2 teams on real case studies, to question the financial statements of SC Range: "Results" and "the profit and loss.

Materials - To conduct seminar Raluca uses the board, chalk, 6 handout for students with the following information: the financial statements of X Company, the seminar objectives and some information about the modeling of the indicator examined, respectively the turnover, the work context contains information on company X, outcomes interpretation, correlations between indicators and some scales.

Structure of the Class - Since the students came (attendance was checked) Raluca starts work at 9.00 announcing the theme "Analysis of factorial turnover" according to the course schedule and seminar objectives. The seminar objectives are made clear. Raluca distributes the handout (Annex 1/The financial statements), and together with the students she identifies the indicator that refers to the turnover. Between about 9:05 and 9:10, Raluca asks students to try to define the indicator that refers to the turnover relying on critical thinking and examines its evolution in time throughout year N. The students participate in the discussions, are creative and critical, especially boys. Together with the students, Raluca tries to identify which were the factors that have caused the modification of this indicator (5 minutes). Helped by the students, Raluca tries to model the indicator sheet explaining at the board how the "human resource" and "productivity" indicators operate upon the "turnover". Raluca stimulate the creative thinking of the students and tries other correlations of the "technical potential", "assets - stocks" indicators with the "turnover". Raluca and the students have identified 5 factorial analysis models using the logic conducting the economic phenomenon, the induction and deduction method (9:05-9:15). Raluca distributes the handout (Annex 2) and makes up 2 teams and the students look for other analysis models relying on critical and creative thinking (time of 5 min).
The students will also work at home. At 9:20, the students receive the handout (Annex 3) representing the work coordinates with some of the indicators needed for the analysis. The students work in teams and calculate the missing indicators. Raluca monitors both teams checking the results. They go together through the quantification of the influences (15 minutes) and interpret the obtained results (10 minutes)/(Annex 4). The students get explanations (5 minutes) about the correlations between the calculated indicators (handout - Annex 5). Between 9:50 and 10:10 there is a student - teacher and teacher-students discussion on the correlation between these value indicators and the results of the case study. At 10:15 the students get the last hand-out with the homework meant to reinforce knowledge gained from this seminar. At the end of the seminar, the students are asked if they have understood the turnover indicator and Raluca announces that the 4 proposed objectives for this seminar have been met. The teaching-learning process ends at 10:20.

Feedback from lecturer Valentina Robu: the seminar takes place in a pleasant environment, without stress and the students learn very well throughout the whole seminar; Raluca deals with each student, all students participate in discussions; she works with hand-out, but she also uses the board for clarification; she asks questions and expects answers; the talk-time between the students and the teacher is balanced.

Comments/Recommendations/Suggestions - I recommend Raluca to think about the following aspects: to slow the pace of teaching, the seminar takes place between 9.00 - 10.20 and is the students’ first activity on that day, most of the students were writing; the students have no experience concerning teamwork; it is necessary to make up smaller teams working in smaller groups students; materials with more questions, with blank spaces for formulas that the students have to complete. I am very glad that I participated in Raluca Crețu’s teaching activity and I can say that she has the skills for teaching the discipline economic and financial analysis.

The workshop objectives have been met.

The strategies of teaching - learning the discipline Financial Analysis occupies a central place in the design and organization of seminars. These activities are carried out according to the teacher's decision, related to the students' interests. The teacher’s (I Albulescu, M Albulescu, 2000) approach will follow a preset plan and will place the student in the most suitable learning circumstance, in a context of
Quality assurance of the teaching-learning process

demands, conditions and resources, that would allow the acquisition of the planned knowledge through objectives.

Next I will briefly present some of the new interactive group methods and techniques, aimed at diversifying the existing methodology for teachers teaching Financial Economic Analysis.

I. Starbursting (stellar explosion)

Starbursting (eng. "star" = star; rom. "Burst" = to explode) is a new method to develop creativity, similar to brainstorming. It starts from the concept and spreads outside, with questions, like stellar explosion. How to proceed? We write the problem or idea on a sheet of paper and we enumerate as many questions as possible that relate to it. A good starting point is represented by the type of questions: What? Who? Where? Why? When? (figure no. 3). The initial list of questions may generate others, unexpected, which require an even greater concentration.

Figure no. 3 Method starbursting (stellar explosion)

The purpose of the method is to get as many questions as possible and as many connections between the component elements as possible. It is a way of stimulating the individual and group creativity. Organized in group, starbursting facilitates the entire community
participation, fosters the creation of questions to questions, just as brainstorming develops ideas on other ideas.

Starbursting method is easy to apply to any age and a wide range of areas. It is costly and requires no detailed explanation. The participants get into the game quickly, it is first a way to relax and, on the other hand, a source of new discoveries.

II. Pyramid method

Pyramid method or the snow ball method is based on the bending of individual work with the group work. It consists in the incorporation of the activity of each member of the team in a larger collective action, aimed at solving a specific task or a given problem.

The phases of the pyramid method:
1. Introductory phase: the teacher exposes the matter; 2. Individual work phase: students work on their own to solve the problem for five minutes. At this stage we write down the questions about the subject matter. 3. Pair work phase: students form groups of 2-3 each to discuss the individual results reached by each of them. Colleagues elicit prompt answers from individuals and at the same time, we write down the new ones. 4. Larger groups phase. Usually there are two groups, approximately equal in the number of participants, made up of the previously existing smaller groups and there are discussions about the solutions reached. At the same time there are answers given to the questions left unanswered. 5. The collective report phase. The whole group meets, considers and concludes on the ideas issued. These may also be on the board to be seen by all the participants and to be compared. The teacher helps to clarify and provide answers to unsolved questions up to this stage; 6. Phase of decision. The final solution is chosen and the findings on the attempts made and on the students’ participation in the activity are determined.

Conclusion

The conclusion which comes out from the above presented issues is that the need for innovation and continuous professional improvement of the teachers is a result of the changes and new demands and challenges in communication and information. That means to review the attitudes and concepts of the teachers, while diversifying and enriching the methodological repertoire to achieve an optimal teaching-learning process of the Financial Economic Analysis in the Bucharest Academy of Economic Studies.
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Trading Mechanisms and Market Quality: Evidence from the London Stock Exchange

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Abstract
Over the last years we have witnessed sweeping changes in trading systems all over the world. Those changes provided academics with an opportunity to look into the microstructure of different markets. Most empirical work in the area has concentrated on comparing changes in liquidity, volatility, trading volume and asymmetric information under different trading settings. Informational efficiency and spread sensitivity to volatility has been neglected however. This paper looks into informational efficiency and spread sensitivity to volatility under different trading settings namely a dealership, an order driven market and a hybrid market. We use FTSE100 and FTSE250 stocks as our sample. The evidence shows that order driven markets respond faster to information compared to dealerships and that spread is more sensitive to volatility in a dealership than in an order driven market. The degree of informational efficiency as well as spread sensitivity to volatility is the same between a dealership and a hybrid market.

Keywords: London Stock exchange, SEAQ, SETS, SETSmm, informational efficiency, spread sensitivity, volatility

Introduction
In the last few years, there has been a race between stock exchange markets all around the world to modernize their trading processes. This came as a response to growing competition among stock exchange markets to attract more and more customers. Three basic
models of trading mechanisms are applied in today’s exchanges, continuous quote driven systems where dealers post bid quotes and ask quotes before order submission, order driven systems where traders submit orders before prices are determined and single call auctions where orders are batched and executed at discrete points in time. This study will concentrate on comparing market quality achieved with respect to informational efficiency and spread sensitivity to volatility by changing from one primary trading mechanism to the other, employing different closing price formations algorithms each time with reference to FTSE100 and FTSE250 stocks.

The number of changes that have occurred around the world do not indicate that a consensus has been reached as to which trading mechanism is the best or at least the most popular. Actually the issue of the best trading mechanism with respect to informational efficiency and spread sensitivity to volatility is far from being resolved. The London Stock Exchange replaced SEAQ (dealer market) with SETS (order-driven) for FTSE100 stocks and SEAQ (dealer market) with SETSm (hybrid) for FTSE250 stocks. NASDAQ has introduced public limit orders competing with market makers’ quotes following allegations of market markers’ collusion to maintain high bid-ask spreads (Christie & Schultz, 1994; Christie et al, 1994). Obviously those three examples indicate a change from quote driven markets (dealerships) to pure order driven markets or hybrids. In France (NSC) and Germany (XETRA), market makers were introduced to provide additional liquidity to already electronic continuous auction markets indicating a change from order driven systems to hybrids. In addition continuous trading for less liquid stocks in the French CAC system and in German XETRA was replaced with call auctions. At the same time stocks listed on the French Nouveau Marche were transferred from a call market to an electronic continuous auction system. The last two incidents indicate movements in completely different directions (Theissen, 2000). Obviously a consensus as to which is the best trading mechanism or which of the available trading mechanisms suits best stocks with specific characteristics is far from clear. Call auctions are usually employed at the beginning or the end of the trading process to provide more efficient opening/closing prices since they allow order flow consolidation however call auctions are randomly used for the whole trading process since they restrict information flow and trading frequency. Most stock exchanges that used single call auctions as their main trading system have now changed to continuous trading achieving tremendous gains in terms of liquidity and informational efficiency, (Amihud, Mendelson & Lauterbach, 1997).
All those examples of stock exchange markets changing their trading systems suggest that more empirical research is needed to identify if there is any increase in quality in terms of informational efficiency and spread sensitivity to volatility when changing from one trading mechanism to the other. The existing empirical literature has concentrated on i) comparing the liquidity of continuous auction and dealer markets (Pagano & Roell, 1990; Lee, 1993; Stoll, 1993; Affleck-Graves, Hedge & Miller, 1994; Christie & Huang, 1994; Huang & Stoll, 1996), ii) the value gained by changing from single call auctions to continuous trading (Amihud, Mendelson & Lauterbach, 1997), iii) the effects of computerization of the trading process (Naidu & Rozeff, 1994), iv) market microstructure and returns volatility (Amihud, Mendelson & Murgia, 1990; Amihud & Mendelson, 1991; Gerety & Mullherin, 1994; Ko & Chung, 1995), v) trading mechanisms and price behaviour emphasizing the introduction of call auctions within continuous trading mechanisms (Ko, Lee & Chung, 1995; Amihud & Mendelson, 1987,1989,1991) with reference to the Korean, Japanese and US stock market respectively, vi) comparing dealerships and continuous auction with respect to informational efficiency following quarterly earnings announcements made during trading and non trading hours on the NYSE and NASDAQ (Greene & Watts, 1996), vii) intraday patterns of spreads, trading volume, volatility and changes in asymmetric information as a result of changes in trading systems (Naik & Yadav, 2004; Cai et al, 2004; Lai, 2007). In this study we wish to examine the degree to which informational efficiency changes as a result of i) changes in trading regime/closing price formation algorithms used each time with reference to FTSE100 & FTSE250 and ii) spread sensitivity to volatility under different trading regimes with reference to the UK market. We believe that there is a very good reason to focus on informational efficiency and spread sensitivity to volatility under different trading regimes because these characteristics of stock trading are linked to the expected rate of return of a traded financial asset.

The London Stock Exchange (LSE) had always been a pure dealership (quote driven market) but in October 1997 the LSE introduced an order driven system for FTSE100 stocks. In an order driven market, market makers are not obliged to provide liquidity. Changes in FTSE250 were introduced in 3/11/2003. The trading system changed from pure dealership (SEAQ) to a hybrid system (SETSmm, mm stands for market makers), which combines the benefits of SETS with LSE market making.
One would expect several changes to occur once a market changes from quote driven to order driven. From the individual investor’s point of view access to trading is much easier which may increase the frequency and the actual numbers of investors trading. Now orders enter the computer straight away and they are matched instantly provided of course that there are orders with similar characteristics pending. It is obvious that the bargaining power of individual investors is increased given their ability to place limit orders achieving better deals. By placing limit orders investors avoid the cost of immediacy. From the market maker’s point of view handling costs are lower because of automated order execution and bid-ask quote manipulation to maintain optimal inventory is no longer necessary since they are no longer obliged to act as liquidity providers. Of course changes in market microstructure (from quote driven to order driven) can have disadvantages as well. The limit order book can make every single investor (including market makers) more vulnerable to asymmetric information and thus reduce the incentive to trade, which may lead to reductions in liquidity. Pagano & Roell (1992) state that ‘an electronic auction market does not provide a means for communicating the trading motives or identity of traders to the market at large beyond displaying brokers’ codes alongside limit orders’. Jain et al (2003) find that the level of informed trading is the same for both dealers and SETS. Naik & Yadav (2004) do not find any evidence of an increase in information asymmetry after the introduction of SETS while Lai (2007) showed that information asymmetry, inside and effective spreads increased after 38 FTSE mid 250 stocks moved from SEAQ to SETS (not SETSmm).

The degree of informational efficiency has attracted little attention and it is an issue worth examining as well. Every single participant in the market has access to the electronic limit order book and can decide more easily on the value of the asset based on the limit orders shown in the order book. However one might argue that given the easier access to trading, there will be more noise in the market distorting the real value of the asset and decreasing informational efficiency. Market makers are supposed to have a better ‘feel’ of the market at any point in time in comparison to individual investors who trade based on what they see on their screens. Wang (1999) with reference to the Sydney Futures Exchange has shown that floor traders can better assess the presence of adverse information i.e. they get a better feel of the market compared to screen traders who are isolated
Experimental research (Thiessen, 2000) has shown that dealer markets can convey information of high quality once the bid-ask spread is eliminated. Greene & Watts (1996) with reference to the NASDAQ/NYSE markets show that NASDAQ is faster in impounding information into prices. Nevertheless no research has been undertaken with reference to the LSE and we do not know if the alleged enhanced ability of the market makers to get a better feel of the market will dominate over the electronic limit order book. In addition Viswanathan & Wang (2002) postulate that expected trading profits are higher in a limit order book setting while variance of profits is smaller in a dealership. If this is the case risk neutral investors will trade in a limit order setting while risk averse investors will trade in a dealership only. In the case of FTSE100 stocks which moved from a dealership to a limit order book setting are we expected to observe a reduction in trading (since risk averse investors will stop trading) and a decrease in informational efficiency? In the case of FTSE250 stocks which moved from a dealership to a hybrid market are we expected to observe an increase in trading leading to higher informational efficiency since now both risk averse and risk neutral investors would like to trade or the level of trading will remain the same as before?

Another issue, which has not been examined at all, is the spread sensitivity to volatility under different trading regimes for both FTSE100 and FTSE250. Cai et al (2004) look into the intraday pattern of volatility in the LSE and conclude that it is U shaped but they do not test for its effect on spreads before and after changes in the trading regime. Spread is supposedly less sensitive to volatility under an order driven regime for three main reasons: i) market makers do not have to manipulate bid-ask quotes to maintain optimal inventory therefore volatility is not more of a concern to them than it is to the rest of the investors, ii) inventory imbalances are diffused among a greater number of market participants since any investor can act conceivably as liquidity provider and iii) in case higher spreads occur because of increased volatility, this will invite more liquidity providers due to the opportunity of making increased profits. Of course it may also be the case that increased volatility will discourage investors to trade and since there are no liquidity providers of last resort as there are in a quote driven market, this will further increase the spread causing severe illiquidity.
In addition closing price formation algorithms could potentially affect price discovery/informational efficiency. The LSE has changed closing price formation algorithms three times ever since it has become an order driven market to accommodate investors’ demands for more representative closing prices. Closing prices need to be representative of the trading activity each day since they are used in portfolio valuation and for trading after the exchange has closed. Following the introduction of SETS for FTSE100 (order-driven), closing prices were initially based on the last automated transaction (20/10/97-13/12/98), then closing price calculation was based on the ten minutes trading volume weighted average (14/12/98-26/05/00) and quite recently price formation is based on a closing call auction (30/05/00 onwards). We believe that the last two closing price formation algorithms provide more efficient closing prices and this should be apparent in the price discovery process because order flow is consolidated. As it has been stated above informational efficiency and spread sensitivity under different trading regimes and closing price algorithms are important issues relating to the expected return of a common stock worthy of further examination, therefore we seek to answer the following questions:

Q1) How does the degree of informational efficiency change in response to different trading regimes/closing price formation algorithms for FTSE100 and FTSE250?

Q2) How does spread sensitivity to volatility change in response to different trading regimes?

The results obtained in this study contribute to the trading mechanisms comparison literature with reference to the London Stock Exchange. First we show that the pace with which information is incorporated into prices is much faster in order driven markets when compared to quote driven markets (FTSE100). Secondly we show that spread is more sensitive to volatility in dealer markets because of their obligation to post affirmative quotes with respect to FTSE100 stocks. There appear to be no significant improvements in informational efficiency for FTSE250 when changing from quote driven to hybrid. In general terms the degree of informational efficiency remains the same. In addition spread sensitivity to volatility is the same since dealers are obliged to post affirmative quotes (committed principal orders) under both trading regimes. To summarize we have learnt that order-driven markets respond faster to new information (FTSE100) and that spread
sensitivity is higher in dealerships because of their affirmative obligation to quote bid and ask prices.

**Methodology**

In order to answer how the degree of informational efficiency and spread sensitivity to volatility changes in response to different trading mechanisms and closing price formation algorithms we need to formulate six hypotheses:

H1) Closing auctions achieve a higher degree of informational efficiency when compared to trading volume weighted average pricing or closing prices based on the last automated transaction (with reference to FTSE100).

The main characteristic of closing auctions is order batching. In that way order flow consolidation and information consolidation is achieved and the possibility of obtaining a price incorporating as much information as possible increases. In addition the ability of block trading to distort prices is minimized due to the batching nature of single call auctions as well as the risk of trading under asymmetric information.

H2) Order driven markets achieve a higher degree of informational efficiency when compared to quote driven markets (with reference to FTSE100).

One could argue that that market makers have the ability to get a better ‘feel’ of the market and respond faster to general market conditions when compared to individual investors who trade mainly on information conveyed by limit orders posted in the electronic limit order book. Market makers have good information on market condition because they can observe buyers and sellers and their transactions. Market makers may have information on the clients of a broker and may be able to draw conclusions about any sort of information that he may possess from his buying and selling behaviour. They may also anticipate the behaviour of particular traders by estimating their inventory position. On the other hand, one could argue that market makers cannot always evaluate correctly the information they are presented with and the only information they may get is from the outstanding limit orders on their screens. In addition the ability to post limit could potentially increase participation from individual investors increasing information flow or noise. According to Pagano & Roell (1992) an electronic auction does not provide a means for communicating the trading motives or identity of traders to the market at large. Thus individual
traders and market makers are not aware of the trading motives of their counterparts and can not assess their quantity and quality of information. Generally speaking the degree of informational efficiency between different trading regimes is an empirical issue.

H3) Hybrid markets achieve a similar degree of informational efficiency compared to dealerships (with reference to FTSE250).

The degree of informational efficiency achieved in those two markets is an empirical issue. On the one hand some might argue that the ability to post limit orders will improve information flow. On the other hand others might argue that the posting of limit orders will not necessarily improve order flow since limit orders may provide mixed signals, reducing informational efficiency. Lai (2007) shows that some FTSE250 stocks which moved from SEAQ to SETS (not SETSmm) experienced an increase in information asymmetry and a reduction in order submission which does not improve information efficiency. Obviously the degree of informational efficiency for quote driven and hybrid is an important empirical issue.

H4) Spread sensitivity to volatility is higher in dealer markets (with reference to FTSE100).

In a dealership, market makers are obliged to maintain an orderly market under any circumstances (volatile or non-volatile). Therefore the bid and ask quotes they post must incorporate some sort of compensation for volatility. In times of high volatility investors may wish to sell volatile stocks and buy less volatile stocks. Since market makers have to accommodate liquidity demand under any circumstances, this will induce inventory imbalances accompanied by severe fluctuations in the value of their inventory. Obviously the spread will be more sensitive to volatility in dealerships in order to compensate for higher risk. Nevertheless in order driven markets, liquidity demand is diffused among a greater number of market participants since any investor can act as liquidity provider and in case higher spreads occur because of increased volatility, this will invite more liquidity providers due to the opportunity of making increased profits. Viswanathan & Wang (2002) postulate that profits are higher when trading in an order book. Therefore if the market is order driven, the spread will be less sensitive to volatility.

H5) Spread sensitivity to volatility is similar in dealer markets compared to hybrid markets (with reference to FTSE250).
In both trading regimes, market makers are present therefore we expect that spread sensitivity to volatility will be similar.

The methodology that follows was initially introduced by Amihud, Mendelson & Lauterbach (1997) to examine the degree of informational efficiency for different trading mechanisms. It was employed to test the efficiency of single call auctions and continuous trading in the Tel Aviv Stock exchange market. Variations of it were employed to test the efficiency of call auctions within the framework of continuous trading in the Tokyo Stock Exchange in two separate occasions. We use this methodology to examine the degree of informational efficiency between a dealership, an order driven market, a hybrid market and different closing price formation algorithms. This methodology is known as ‘relative return dispersion’ (RRD) and is based on the variance of returns across securities. In the first instance we need to regress individual stock returns on market index returns and obtain the residuals. Then we square the residuals obtained from the market model and average over the stocks included in our sample over different trading regimes and different closing price formation algorithms. Symbolically this is given by:

\[ R_{it} = c + \beta M_{it} + \epsilon_i \]  

\[ \text{RRD}_t = \frac{1}{N} \sum_{i=1}^{N} \epsilon^2_i \]

The dispersion of values at every single point in time due to firm specific information should be independent of the trading mechanism used each time, therefore any systematic differences observed between the different trading mechanisms and the different algorithms can be attributed solely to the trading mechanism. Lower relative return dispersion indicates smaller pricing errors relative to contemporaneous market index returns, which means that information is incorporated faster into prices. This may be due to faster adjustment to changes in the market index and smaller firm specific errors. Higher relative return dispersion indicates under reaction and may be due to lagged adjustment to market returns and high firm specific noise. The extent to which each of those factors (adjustment to market returns and firm specific noise) affects the degree of efficiency of each trading regime and closing price formation algorithms is examined by estimating a lagged market regression model for each stock in the sample:
\[ R_{it} = c + \beta MR_t + L \beta MR_{t-1} + e_t \] (3)

Where \( R_{it} \) is returns for each individual stock and \( MR_t \) and \( MR_{t-1} \) are contemporaneous and lagged index returns. Examination of the (in)significance of the coefficients obtained will allow us to determine if the degree of efficiency observed is due to lagged adjustment to the index. Controlling for lagged adjustment will also allow us to examine the variance of the residuals obtained from the lagged market model for each stock and see how fast firm specific information is incorporated in prices. Changes in the trading system should not have changed any fundamental information about the stocks traded; therefore any systematic differences in the variance of the residuals will reflect how fast firm specific information is incorporated in prices. If it turns out that the variance increases then firm specific information is not incorporated fast enough into prices and this can be attributed to the trading mechanism.

We modify the methodology described above (Amihud et al., 1997) by adding the Fama & French factors. Therefore equations (1) and (3) are re-written as:

\[ R_{it} = c + \beta MR_{it} + SMB_t + HML_t + e_{it} \] (4)

\[ R_{it} = c + \beta MR_{it} + L \beta MR_{it-1} + SMB_t + HML_t + e_{it} \] (5)

We also employ a second methodology (Theissen, 2000) to examine informational efficiency, which can only be used with high frequency data. In order to examine this we regress changes in transaction prices on changes in the real value of the asset (mid-quotes) and on past pricing errors. Symbolically this is expressed as:

\[ (p_t - p_{t-1}) = \alpha + \beta (v_t - v_{t-1}) + \gamma (p_{t-1} - v_{t-1}) + \epsilon_t \] (6)

where \( p_t \) is the transaction price as formed under the different trading regimes and \( v_t \) is the real value of the asset as captured by the mid-quote. In all empirical market microstructure studies, the mid-quote is generally accepted to be the real value of the asset. Kim & Ogden (1996) consider the mid-quote following a transaction as the real value of the asset and they use it to estimate the components of the bid-ask spread. In an efficient market the real value of the asset as captured by the mid quote should be reflected imminently in prices, therefore \( \beta \) should assume the value of one. If \( \beta \) assumes a value lower than one then it means that the market under reacts to incoming information while if it assumes a value higher than one then it means that it
overreacts to incoming information. Restrictions on $\beta$ are tested by Wald tests. $\gamma$ provides estimates of the effects of past pricing errors on changes in prices and the extent to which they are corrected. In an efficient market $\gamma$ should assume negative values meaning that past pricing errors are corrected, therefore the more negative the value is the faster past pricing errors are corrected. We strongly believe that the above methodology is the ultimate way to examine informational efficiency and provides first class evidence since it allows us to consider every single trade during the day.

In order to examine the effect of volatility on spread sensitivity under different regimes we need to introduce two separate measures of volatility. The first one will be used as an input to calculate a second liquidity indicator while the second one will be used as a regressor on the sensitivity model. The volatility measure which will be used as input is estimated as:

$$\text{VOLATILITY}_{1it} = \frac{H_{it} - L_{it}}{0.5(H_{it} + L_{it})} \quad (7)$$

Where $H_{it}$ is the highest price recorded within the day and $L_{it}$ is the lowest price recorded within the day. The difference between high price and low price divided by the average of those two prices can provide us with an indication of volatility under different regimes. However we believe that this is a crude measure of volatility to include as regressor in the sensitivity model because it fails to distinguish the effect of the trading mechanism from that of the general market environment (e.g news, events, liquidity and asymmetric information). For that reason we estimate a GARCH(1,1) model for each stock in our sample and incorporate in the variance equation changes in the real value of the asset as captured by the bid-ask midquote. The mean equation is given by:

$$R_t = c + e_t \quad (8)$$

Where $R_t$ is returns and $e_t$ is the error term. This equation is estimated separately for each stock in the sample. The variance equation is given by:

$$\sigma_t^2 = c + \delta e_{t-1}^2 + \zeta \sigma_{t-1}^2 + \eta \left[ \frac{(bid_t + ask_t)}{2} - \left( \frac{(bid_{t-1} + ask_{t-1})}{2} \right) \right] \quad (9)$$
where $\sigma_t^2$ is the conditional variance, $\varepsilon_{t-1}^2$ is the lagged squared residual from the mean equation or news about volatility from the previous period, $\sigma_{t-1}^2$ is the last period’s forecast variance and the term in squared brackets represents changes in the real value of the asset. We believe that by including changes in the real value of the asset we manage to separate the effect of the trading mechanism from the market environment. Any news, trading activity, liquidity or asymmetric information pertinent to each stock in the sample should be reflected in changes in the real value, captured by changes in the mid quote allowing full investigation of spread sensitivity to volatility. Wang (1999) comparing different trading systems in the Sydney Futures Exchange uses ‘daily average transaction size’ and ‘number of trades’ to separate the effect of the trading mechanism from that of the market environment. We believe that by incorporating changes in the real value of the stock we capture every change in the external environment. Spread sensitivity to volatility will be estimated by the following regression:

$$\text{spread}_t = c + \mu_t \sigma_t^2 + e_t \quad (10)$$

where spread is the daily closing bid-ask spread for each stock in our sample and $\mu_t$ is the coefficient of the conditional variance for each individual stock obtained by running a GARCH (1,1). If $\mu_t$ turns out to be significant then it means that volatility affects the spread.

The above exercise is undertaken by employing high frequency data for FTSE100 and FTSE250 stocks. The only difference is that returns this time are based on transaction prices rather than daily closing prices.

**Dataset and Descriptive Statistics**

Daily price data for FTSE100 companies was obtained from DATASTREAM and transactions data from Securities industry Research Centre of Asia Pacific (SIRCA). The data set under consideration ranges from 18/10/1996 to 30/04/2003. The choice of the data set reflects a quote-driven trading regime and an order-driven trading regime, which is further sub-divided into three different closing price formation periods. This allows us to test the degree of informational efficiency under different trading regimes, which relates to the first and second research hypotheses and the extent to which spread is sensitive to volatility under those regimes which relates to the
fourth research hypothesis. Each subset represents a different trading regime/closing price formation algorithm and incorporates the following time period: the first subset ranges from 18/10/1996 to 17/10/1997 and reflects a dealership where closing prices are based on the bid-ask midquote, the second subset ranges from 20/10/1997 to 13/12/1998 during which period the market is order driven and the closing prices were based on the last automated transaction (order book), the third subset ranges from 14/12/1998 to 26/05/00 during which period the closing prices were based on the last ten minutes of trading volume (VWAP: volume weighted average price) and finally the fourth subset ranges from 30/05/2000 to 30/04/2003 during which period the closing prices were formed by a closing auction. Unfortunately the transactions data sample does not extend over all those periods. We use trade data for two months following changes in the trading regime.

Daily price data for FTSE250 companies was obtained from DATASTREAM and transactions data from securities industry Research Centre Asia Pacific (SIRCA). The data set under consideration ranges from 01/01/2003 to 12/08/2004. The choice of the data set reflects a quote-driven trading regime (SEAQ) where liquidity is provided solely by market makers and a hybrid market (SETSmm) where individual traders can choose to trade between themselves if they wish to do so or trade with market makers who are obliged to provide liquidity through ‘committed principal orders’. The change from one system to the other occurred in 03/11/03. This allows us to test the degree of informational efficiency under different trading regimes, which relates to the third research hypothesis and the extent to which spread is sensitive to volatility under those regimes, which relates to the fifth research hypothesis.

The daily data obtained includes the following variables: closing bid price, closing ask price, daily closing price, highest daily price, lowest daily price and closing trading volume. These variables were further processed to obtain other variables such as: bid-ask spread, bid-ask mid quote which is equal to (bid-price+ask-price)/2 and is used as a proxy for the real value of the asset, returns, returns volatility modeled as GARCH(1,1), ‘volatiltity1’ estimated as the difference between daily high and daily low prices divided by the average of those two prices and another liquidity measure ‘L1’ which is estimated as the ratio of volume turnover to volatility1. The intuition behind this liquidity measure is that if the £ amount of stocks traded is high while price movement is small then the market is very liquid. However if the £ amount of stocks traded is relatively constant but price fluctuation is high then this particular
market is not liquid. The transactions data incorporates all trades, transaction prices, bid-ask quotes and volume.

Descriptive statistics for FTSE100 (Table no.1) with reference to the two liquidity measures employed here (bid-ask spread and L1) show that liquidity decreased once the market changed from quote driven (dealership) to order driven. In particular absolute spread appears to have increased from 2.66 to 4.18 following the change in the trading regime while it remains relatively stable for the rest of the periods examined. In order to decide on the (in) significance of changes in the mean values we undertake ANOVA tests. The increase in absolute spread following the change form quote driven to order driven is significant while changes in the spread for the rest of the periods are insignificant. The p values obtained for the estimated ANOVA statistic are much higher than 0.05. This result was somewhat expected since for the rest of the periods, the trading mechanism has remained the same; the only difference is in the closing price formation algorithm. The results obtained for absolute spread are further confirmed by L1, which captures liquidity in terms of £s of stocks traded controlling for price fluctuations. Higher (lower) values of L1 indicate that liquidity increases (decreases). When testing for mean (in) equality, the ANOVA tests show that the decrease in L1 is significant when the trading mechanism changes but changes in the mean values of L1 for the rest of the periods are insignificant at 0.05.

Descriptive statistics for FTSE250 (Table no.2) show that absolute spread decreased over the period examined which indicates an improvement in liquidity however ANOVA tests show that this improvement is not significant. The p value obtained is equal to 0.49. L1, which is an alternative measure of liquidity, shows that liquidity had actually decreased however ANOVA tests indicate that the decrease is insignificant. In other words the change from dealership (SEAQ) to a hybrid system (SETSmm) does not seem to have brought about any changes in liquidity.

**Table no.1 and no.2**: liquidity and volatility measures: FTSE100 and FTSE250 (p values in brackets)

<table>
<thead>
<tr>
<th>Table 1 FTSE100</th>
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<tbody>
<tr>
<td>FTSE100: LIQUIDITY MEASURES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRADING REGIME</td>
<td>SEAQ</td>
<td>SETS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Empirical Findings
The statistical analysis aims at i) investigating how fast information is incorporated into prices and the degree to which individual stocks under/over react to incoming information and ii) examine if and the extent to which bid-ask spread is sensitive to volatility under different trading regimes. Examination occurs under different trading regimes namely a dealership (SEAQ), a quote drive-market (SETS) and a combination of both (SETSmm) for the UK market.

Relative Return Dispersion: FTSE100 Stocks
The average value of squared residuals obtained by regressing individual FTSE100 stocks returns against the index, lagged market returns and the Fama & French factors appears to decrease over time.
Trading Mechanisms and Market Quality: Evidence from the London….

The highest value is achieved when the market is quote-driven (dealership) implying that market makers fail to assess information as fast as they should. Once the market regime changes from quote driven (dealership) to order driven the mean squared value of residuals reduces by 0.01. ANOVA tests reject mean equality between the first two periods but fail to reject mean equality between the third and the fourth periods. This means that the introduction of a closing auction did not bring about the desired result of increasing the degree of informational efficiency achieved up to that moment implying that a closing auction is not much superior to that of VWAP (volume weighted average pricing). Actually a closing auction and VWAP appear to achieve the same degree of informational efficiency (H1 is rejected). The observed decrease in relative return dispersion between the first and the second period as captured by the mean values of the squared residuals can be attributed either to increased adjustments to changes in the relevant index or/and low firm specific noise. The extent to which each of these factors has contributed to the observed increase in RRD is examined by regressing stock returns to market returns, lagged market returns and FF factors.

The results presented in Table no.4 (PANEL A AND PANEL B) indicate that the degree of informational efficiency increases slightly following changes in the trading regime. When the market is quote driven (dealership) the coefficient for contemporaneous market returns assumes a highly significant positive value (0.73) implying that individual stocks respond to the index and the general market condition. Of course if individual stocks responded to a full extent the value obtained should be equal to 1. The $R^2$ adj obtained in this case is equal to 0.17. When we add lagged market returns we find that the coefficient of contemporaneous market returns remains the same and the coefficient of lagged market returns assumes a value of 0.11 which is significant indicating that individual stocks respond with a small lag to the index. $R^2$ adjusted increases slightly to 0.18. When the market regime changes from quote driven (dealership) to order-driven the coefficient of current index returns increases to 0.78 and $R^2$ ADJ becomes 0.20, indicating that the explanatory power of market returns has increased. When we add lagged index returns, the coefficient gets quite small. From 0.11 (quote driven market) reduces to 0.02 (order driven market). In this case $R^2$ ADJ increases indicating that FTSE100 stocks respond faster. This pattern remains valid for the rest of the periods examined. We would expect to see some changes for the
second, third and fourth period given the change in the closing price formation algorithm however it appears that it is only changes in the trading regime itself (from quote driven to order driven) that can affect informational efficiency. PANEL B presents results for FTSE100 stocks incorporating the FF factors: SMB (equally weighted) and HML (equally weighted). The results are similar to the ones obtained from the simple regressions. The coefficient of contemporaneous index returns is equal to 0.69(0.00) for the first period (quote driven) and then increases to 0.72(0.00) for the second period (order driven). The coefficient of lagged index returns is equal to 0.10(0.00) for the first period (quote driven) and then reduces to 0.02(0.02) for the second period (order driven) indicating that the degree of informational efficiency increases in the second period (order driven). At this point it is worth mentioning that R² ADJ increases from 0.18 to 0.20. The FF factors are significant for both periods under consideration and their inclusion in the regressions do not appear to alter the results in any way. Results are qualitatively the same for the rest of the periods.

Size-based analysis: Results obtained for small and big companies indicate that it takes longer for smaller companies to adjust to incoming information. The coefficient of lagged market returns is slightly higher for smaller companies for most of the periods under consideration. In particular in the first period under examination (quote driven, Table no.4, PANEL A) the coefficient of lagged index returns for big companies is 0.11 and for small companies is 0.14. Of course it is not a sizeable difference but you need to keep in mind that the stocks under examination are FTSE100 stocks. Perhaps the results would be more pronounced if we employed stocks with major differences in market capitalization. When the trading regime changes the coefficient of lagged market returns for small companies reduces from 0.14 to 0.04 and for big companies from 0.11 to 0.01, which is evidence of improvement in informational efficiency. Results remain similar even when we add the FF factors.

Amihud, Mendelson & Lauterbach (1997) state that any increases/ decreases in RRD can very well be attributed to either lagged/increased adjustments to changes in the relevant index or/and high/low firm specific noise. The above exercise was undertaken to control for the effect of lagged adjustment and test the extent to which firm specific noise contributes to decreased RRD. The variance of the residuals (Table no.3) obtained from the lagged index regression and FF factors appear to decrease between the first two periods. ANOVA tests reject mean equality for the first two periods but fail to reject mean
equality between VWAP and the closing auction, indicating that the closing auction is not superior to VWAP. Generally speaking while the change in market microstructure should not have changed any fundamental information about the stocks, it had a favourable effect on the precision with which new firm specific information is incorporated into prices.

Table no.3: FTSE100 squared residuals and residuals variance (p values in brackets)

<table>
<thead>
<tr>
<th>TRADING REGIME</th>
<th>SEAQ DEALERS</th>
<th>SETS:LAST TRANSACTION</th>
<th>SETS: VWAP</th>
<th>CLOSING AUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEAN</td>
<td>0.0296</td>
<td>0.0121</td>
<td>0.0185</td>
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<td>ANOVA</td>
<td>12.7(0.00)</td>
<td>1.15(0.27)</td>
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<tr>
<td>MEDIAN</td>
<td>0.0247</td>
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<td>0.0177</td>
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</table>

RESIDUALS VARIANCE WITH FF FACTORS FOR FTSE100

<table>
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<tr>
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<th>SETS:LAST TRANSACTION</th>
<th>SETS: VWAP</th>
<th>CLOSING AUCTION</th>
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</thead>
<tbody>
<tr>
<td>0.5*10^{-3}</td>
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<td>0.2*10^{-3}</td>
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<td>0.4*10^{-3}</td>
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Table no.4: FTSE100 informational efficiency over four different periods (p values in brackets)

PANEL A

<table>
<thead>
<tr>
<th>QUOTE DRIVEN MARKET/DEALERSHIP: SEAQ</th>
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<tr>
<td>-----</td>
</tr>
<tr>
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</tr>
<tr>
<td>(0.15)</td>
</tr>
<tr>
<td>MR_t</td>
</tr>
<tr>
<td>(0.00)</td>
</tr>
<tr>
<td>MR_{t+1}</td>
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<tr>
<td>(0.00)</td>
</tr>
<tr>
<td>R^2 ADJ</td>
</tr>
<tr>
<td>0.18</td>
</tr>
<tr>
<td>0.20</td>
</tr>
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ORDER DRIVEN MARKET/SETS-LAST AUTOMATED TRANSACTION

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<tr>
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<td>0.00 (0.69)</td>
<td>0.00 (0.67)</td>
<td>0.00 (0.65)</td>
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<tr>
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<td>0.77 (0.00)</td>
<td>0.69 (0.00)</td>
<td>0.67 (0.00)</td>
</tr>
<tr>
<td>MRt-1</td>
<td>0.02 (0.02)</td>
<td>0.04 (0.00)</td>
<td>0.05 (0.00)</td>
<td>0.01 (0.00)</td>
</tr>
<tr>
<td>R²ADJ</td>
<td>0.20</td>
<td>0.20</td>
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<td>0.21</td>
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VOLUME-WEIGHTED AVERAGE PRICE

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<tr>
<td>R²ADJ</td>
<td>0.19</td>
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CLOSING AUCTION

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<td>0.66 (0.00)</td>
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<tr>
<td>MRt-1</td>
<td>0.03 (0.00)</td>
<td>0.05 (0.00)</td>
<td>0.05 (0.00)</td>
<td>0.02 (0.00)</td>
</tr>
<tr>
<td>R²ADJ</td>
<td>0.18</td>
<td>0.19</td>
<td>0.18</td>
<td>0.19</td>
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</table>

PANEL B

QUOTE DRIVEN MARKET/DEALERSHIP

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<tr>
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<td>0.00 (0.09)</td>
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<tr>
<td>MRt</td>
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<td>0.62 (0.00)</td>
<td>0.63 (0.00)</td>
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<td>0.01 (0.00)</td>
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<td>HML</td>
<td>-0.001 (0.01)</td>
<td>-0.00 (0.00)</td>
<td>-0.00 (0.00)</td>
<td>-0.00 (0.00)</td>
</tr>
<tr>
<td>MRt-1</td>
<td>0.10 (0.00)</td>
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<td>R²ADJ</td>
<td>0.18</td>
<td>0.17</td>
<td>0.17</td>
<td>0.16</td>
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Trading Mechanisms and Market Quality: Evidence from the London….

<table>
<thead>
<tr>
<th>ORDER DRIVEN MARKET:SETS-LAST AUTOMATED TRANSACTION</th>
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<th>SMALL</th>
<th>MEDIUM</th>
<th>BIG</th>
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<td>0.00 (0.49)</td>
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<tr>
<td>MR_t</td>
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<td>0.72 (0.00)</td>
<td>0.68 (0.00)</td>
<td>0.70 (0.00)</td>
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<tr>
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<td>-0.002 (0.00)</td>
<td>0.02 (0.00)</td>
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<tr>
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<td>-0.001 (0.10)</td>
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<td>-0.00 (0.00)</td>
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<tr>
<td>MR_{t-1}</td>
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<tr>
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</table>

<table>
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<th>VOLUME-WEIGHTED AVERAGE PRICE</th>
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<th>BIG</th>
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<td>-0.01 (0.05)</td>
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<td>-0.00 (0.00)</td>
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<td>0.07 (0.00)</td>
<td>0.06 (0.00)</td>
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<td>R^2-ADJ</td>
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<td>0.20 0.19</td>
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<td>C</td>
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<td>0.00 (0.00)</td>
<td>0.00 (0.00)</td>
<td>0.00 (0.00)</td>
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<td>MR_t</td>
<td>0.67 (0.00)</td>
<td>0.68 (0.00)</td>
<td>0.60 (0.00)</td>
<td>0.63 (0.00)</td>
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<td>-0.003 (0.00)</td>
<td>0.01 (0.00)</td>
<td>0.01 (0.00)</td>
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<tr>
<td>HML</td>
<td>-0.001 (0.00)</td>
<td>-0.001 (0.00)</td>
<td>-0.00 (0.00)</td>
<td>-0.00 (0.00)</td>
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<tr>
<td>MR_{t-1}</td>
<td>0.03 (0.00)</td>
<td>0.08 (0.00)</td>
<td>0.05 (0.00)</td>
<td>0.04 (0.00)</td>
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<tr>
<td>R^2-ADJ</td>
<td>0.19 0.18</td>
<td>0.17 0.16</td>
<td>0.19 0.18</td>
<td>0.19 0.18</td>
</tr>
</tbody>
</table>
Relative Return Dispersion: FTSE250 Stocks

The average value of squared residuals obtained by regressing individual FTSE250 stocks returns against the index and the FF factors appears to decrease over time (Table no.5) however ANOVA tests do not reject the null hypothesis of mean equality. In other words there appears to be no change in the degree of informational efficiency between a dealership and a hybrid market, which means that the third hypothesis is not rejected. The main characteristic of both trading systems (SEAQ and SETSmm) is the presence of market makers even though SETSmm allows trading through the electronic book. The ability to engage in individual trading (without employing the services of market makers) did not bring about an increase in informational efficiency.

In order to be consistent with the methodology described above, we need to present results for FTSE250 stocks response to current and lagged index returns following changes in the trading regime (Table no.6). By examining closely the results presented for stocks in FTSE250, one might argue that there is an improvement in informational efficiency given the increases in the coefficients observed for current market returns and reductions observed for lagged market returns. In particular the coefficient of current market returns increases from 0.60 to 0.74 while the coefficient for lagged market returns decreases from 0.11 to –0.05 following the introduction of the order book, however we can talk about ‘real’ increases in informational efficiency when the coefficient for lagged market returns is insignificant. In addition the change in the mean value of squared residuals discussed above is insignificant between the two regimes, which mean that the degree of informational efficiency has remained unchanged. At this point one should notice that the sum of current and lagged returns coefficients remains almost the same, 0.71 before the introduction of SETSmm against 0.69 after the introduction of SETSmm. The fundamental relation between returns on individual stocks and the market was unaffected by the change even though the coefficient of lagged market returns appears reduced. However this reduction is not significant to affect RRD. PANEL B presents results for FTSE250 stocks incorporating the FF factors. When the market is quote driven (SEAQ) the coefficient of current market returns is equal to 0.59 and the coefficient of lagged market returns is equal to 0.06. When the trading regime changes both coefficients increase. The increase in the
Trading Mechanisms and Market Quality: Evidence from the London….

The coefficient of current market returns from 0.59 to 0.65 is offset by an increase in the coefficient of lagged market returns from 0.06 to 0.10 indicating that there is not any improvement in informational efficiency, thus the insignificant reduction in RRD (Table no.5). Residuals variance remains the same (Table no.5) which means that the degree to which firm specific information is incorporated into prices has remained unchanged.

**Size-based analysis:** the number of stocks in FTSE250 compared to FTSE100 allows us to vary the number of stocks included in the small and big groups so we run regressions for two different sub-samples in each category. Results obtained for the smaller groups show that the coefficient of current returns increases more when compared to the bigger groups. In particular, the coefficient of current returns for the 20 smallest companies in the sample (Table no.6, PANEL B) increases from 0.49 to 0.71 while the coefficient of current returns for the 20 biggest companies in the sample increases from 0.69 to 0.77. Unfortunately however this increase in the coefficient of current returns for small companies, which might imply an increase in informational efficiency, is offset by an increase in the coefficient of lagged index returns from 0.04 to 0.21 following the change in the trading regime. The coefficient of lagged index returns for big companies is insignificant under both trading regimes (Table no.6, PANEL B), implying that the change in the trading regime did not have much impact on the biggest companies even though it did increase the coefficient of current returns.

**Table no.5:** FTSE250 squared residuals and residuals variance (p values in brackets)

<table>
<thead>
<tr>
<th>TRADING REGIME</th>
<th>RELATIVE RETURN DISPERSION: SQUARED RESIDUALS WITH FF FACTORS FOR FTSE250</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEAN</td>
<td>SETSmm</td>
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<td>ANOVA</td>
<td>1.02(0.30)</td>
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<tr>
<td>MEDIAN</td>
<td>0.29*10^{-3}</td>
</tr>
<tr>
<td></td>
<td>0.24*10^{-3}</td>
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RESIDUALS VARIANCE WITH FF FACTORS FOR FTSE250

<table>
<thead>
<tr>
<th>SEAQ</th>
<th>HYBRID (SETSmm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.02</td>
<td>0.01</td>
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<td>0.017</td>
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</table>

**Table no.6:** FTSE250 informational efficiency over SEAQ and SETSmm (p values in brackets)

**PANEL A:** FTSE250 informational efficiency over SEAQ and SETSmm without FF factors

<table>
<thead>
<tr>
<th>FTSE250: SEAQ/DEALERSHIP</th>
<th>ALL STOCKS</th>
<th>SMALL20</th>
<th>SMALL30</th>
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<th>BIG30</th>
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<tbody>
<tr>
<td>C</td>
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</tr>
<tr>
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<tr>
<td>MRₜ</td>
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<tr>
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<td>(0.00)</td>
</tr>
<tr>
<td>MRₜ₋₁</td>
<td>0.11</td>
<td>0.11</td>
<td>0.00</td>
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<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
</tr>
<tr>
<td>R²ADJ</td>
<td>0.12</td>
<td>0.13</td>
<td>0.04</td>
<td>0.05</td>
<td>0.21</td>
</tr>
<tr>
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<td>0.06</td>
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</table>

<table>
<thead>
<tr>
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<th>SMALL30</th>
<th>BIG20</th>
<th>BIG30</th>
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<td>(0.00)</td>
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<tr>
<td>MRₜ</td>
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<td>0.74</td>
<td>0.84</td>
<td>0.84</td>
<td>0.75</td>
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<tr>
<td>MRₜ₋₁</td>
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<td>(0.04)</td>
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<td>R²ADJ</td>
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<td>0.11</td>
<td>0.03</td>
<td>0.04</td>
<td>0.17</td>
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<tr>
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<td>0.05</td>
<td>0.05</td>
<td>0.17</td>
<td>0.14</td>
<td>0.15</td>
</tr>
</tbody>
</table>

**PANEL B:** FTSE250 informational efficiency over SEAQ and SETSmm with FF factors

<table>
<thead>
<tr>
<th>FTSE250: SEAQ/DEALERSHIP FF FACTORS EQUALLY WEIGHTED</th>
<th>ALL STOCKS</th>
<th>SMALL20</th>
<th>SMALL30</th>
<th>BIG20</th>
<th>BIG30</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
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<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
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<td>(0.00)</td>
</tr>
<tr>
<td>MRₜ</td>
<td>0.61</td>
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<td>0.56</td>
<td>0.49</td>
<td>0.57</td>
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<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
</tr>
<tr>
<td>MRₜ₋₁</td>
<td>0.06</td>
<td>0.04</td>
<td>0.04</td>
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<td>(0.00)</td>
<td>(0.29)</td>
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<tr>
<td>SMB</td>
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<td>0.00</td>
<td>-0.00</td>
</tr>
<tr>
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<td>(0.51)</td>
<td>(0.00)</td>
<td>(0.00)</td>
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<td>(0.00)</td>
</tr>
</tbody>
</table>

SMB
Informational Efficiency: An Alternative Methodology

In this section we regress the transaction price of each trade on the real value of the asset as captured by the mid-quote and past pricing errors. Results presented in Table no.7 (PANEL A, all stocks) show that $\beta$ increases from 0.06 to 0.68 following the change from quote driven to order driven indicating that individual stocks react much faster to incoming information. $\gamma$ which provides an estimate of the past pricing error remains almost the same indicating that the degree to which pricing errors are corrected has not changed. In other words the informational efficiency of FTSE has improved following changes in the trading regime. The results presented for FTSE100 following this specific methodology are conducive to the results obtained by RRD. Unfortunately the Results obtained for FTSE250 are not as intriguing as those for FTS100 however they are conducive to the results obtained by using the RRD methodology. In particular $\beta$ increases from 0.40 to 0.42 following the change from SEAQ to SETSmm while $\gamma$ changes from -0.64 to -0.63. In other words there are no significant changes in the market. We undertake the same exercise concentrating on company size. Big companies appear to react faster than smaller companies’ maybe because there is bigger coverage by analysts. The change in the trading regime does not seem to bring about any changes in the degree of informational efficiency as far FTSE250 stocks are concerned.
Table no.7: informational efficiency using high frequency data

**PANEL A: FTSE100**

<table>
<thead>
<tr>
<th></th>
<th>QUOTE DRIVEN MARKET/DEALERSHIP: SEAQ</th>
<th>ORDER DRIVEN MARKET: SETS-LAST AUTOMATED TRANSACTION</th>
</tr>
</thead>
<tbody>
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<td>ALL</td>
<td>SMALL</td>
</tr>
<tr>
<td>C</td>
<td>-0.35</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
<td>(0.00)</td>
</tr>
<tr>
<td>β</td>
<td>0.06</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
<td>(0.00)</td>
</tr>
<tr>
<td>γ</td>
<td>-0.89</td>
<td>-0.80</td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
<td>(0.00)</td>
</tr>
</tbody>
</table>

**PANEL B: FTSE250**

<table>
<thead>
<tr>
<th></th>
<th>FTSE250: SEAQ/DEALERSHIP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ALL STOCKS</td>
</tr>
<tr>
<td>C</td>
<td>-0.00</td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
</tr>
<tr>
<td>β</td>
<td>0.40</td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
</tr>
<tr>
<td>γ</td>
<td>-0.64</td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>FTSE250: HYBRID/SETSmm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ALL STOCKS</td>
</tr>
<tr>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>(0.09)</td>
<td>(0.00)</td>
</tr>
<tr>
<td>0.42</td>
<td>0.30</td>
</tr>
<tr>
<td>(0.00)</td>
<td>(0.00)</td>
</tr>
<tr>
<td>-0.63</td>
<td>-0.58</td>
</tr>
<tr>
<td>(0.00)</td>
<td>(0.00)</td>
</tr>
</tbody>
</table>

**Spread Sensitivity to Volatility: FTSE100 & FTSE250**

The results presented in Table no.8 show that volatility appears to be significant when market makers set the spread. The coefficient obtained is positive and significant. However when trading occurs by submission of limit orders and the spread is regressed against volatility, it appears to be insignificant at 0.05 or 0.10. We believe that this is the case because inventory imbalances are distributed among all traders rather than a specific group of people namely the market makers,
therefore volatility to market makers is not more of a concern than it is to every single investor. The results obtained indicate that the spread is more sensitive to volatility under a dealership than in an order driven market. When the effect of volatility on spread is tested for FTSE250 stocks (Table no.9) before and after the introduction of SETSmm, we find that volatility is significant for both periods and this is explained from the fact that under both trading regimes markets makers are present. Volatility does affect their inventories and as a consequence of that the spread must incorporate some sort of compensation for the extra risk that they face. The above findings provide support for the fourth and fifth hypothesis.

Table no.8: FTSE100 spread sensitivity to volatility over a quote driven market (dealership) and an order driven market

<table>
<thead>
<tr>
<th></th>
<th>QUOTE DRIVEN MARKET:SEAQ</th>
<th>ORDER DRIVEN MARKET</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ALL STOCKS</td>
<td>SMALL</td>
</tr>
<tr>
<td>C</td>
<td>1.44 (0.00)</td>
<td>2.39 (0.00)</td>
</tr>
<tr>
<td>GARCH</td>
<td>0.43 (0.00)</td>
<td>0.74 (0.00)</td>
</tr>
</tbody>
</table>

Table no.9: FTSE250 spread sensitivity to volatility over a quote driven market (dealership) and a hybrid market

<table>
<thead>
<tr>
<th></th>
<th>QUOTE DRIVEN MARKET:SEAQ</th>
<th>HYBRID MARKET</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ALL STOCKS</td>
<td>SMALL</td>
</tr>
<tr>
<td>C</td>
<td>3.23(0.00)</td>
<td>1.33 (0.00)</td>
</tr>
<tr>
<td>GARCH</td>
<td>0.39 (0.00)</td>
<td>0.49 (0.00)</td>
</tr>
</tbody>
</table>

Conclusion
The last years exchange markets around the world have embarked on a race to improve their services in an attempt to attract more and more investors. We investigate the degree of quality achieved by changing from an electronic quote driven market (dealership) to an order driven market and the efficiency of the various closing price formation algorithms employed each time in terms of price discovery/informational efficiency and spread sensitivity to volatility for FTSE100 and FTSE250 stocks. We find that there is no difference
as far as informational efficiency is concerned between different closing price formation algorithms since the introduction of SETS (order driven market). However we find that order driven markets respond faster to information in comparison to dealerships. We also find that the spread is more sensitive to volatility in a dealership than in an order driven market. We are not aware of any other study examining informational efficiency or spread sensitivity to volatility in a similar setting therefore we can not compare the results obtained here. Stocks in FTSE250 were initially traded in a quote driven market (SEAQ) but then they changed to a hybrid system (SETSmm), which combines both market making and an order book. The degree of informational efficiency as well as spread sensitivity to volatility remains the same.

Bibliography


Influences of Innovation on Employment in Romania, in the European Context

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Faculty of Economics and Business Administration
West University of Timișoara, Romania

Abstract
This paper aims to identify and analyze the effect of innovations on the employment in Romania. The type of innovation chosen is broadband and we study its impact on human resource in science and technology (HRST) in Romania, compared to the EU average. As representative indicators are taken into account the broadband penetration rate and the number of HRST, during 2007 – 2011. In the research we made the conceptual boundaries of the above mentioned indicators and through a quantitative analysis and a unifactorial econometric model we show the influence of broadband on HRST, in Romania.

Keywords: broadband, employment, HRST

Introduction
Today’s society presents a change in the way of purchasing, processing, transforming and distributing knowledge and information and this was made possible by the convergence of three technological keys: information technology, telecommunications and production of multimedia content, which together form the Information and Communication Technology sector. Very high growth rates are recorded in advanced countries, far superior to traditional sectors.

The sector presents a particular cost structure, which involves the use of high initial fixed cost, irrecoverable and independent of the sales volume, when producing a good or service through the use of ICT.
For example, the design of telecommunication technologies incorporating optical fiber or a database; once created the infrastructure, transportation cost of the service is insignificant and constant, being independent of the number of network users, reason why there is no limits of production or sale.

Important is not the technology by itself, but its functioning which allows access to knowledge, information and communication – elements more and more important in economic and social life. It contributes "to the improvement in productivity of the capital and work factors, which lead to a rise and diversification in production. Thus, they make up an important source for the creation of new products, services and jobs, first within their own sector, and then, through the expansion of production and exchanges, in other economic activities as well.” (Pitorac and Cismaş, 2012)

For these reasons, this research conducts an analysis of how broadband penetration rate affects economic life, particularly human resource in science and technology (HRST). In the first part of the paper are presented the indicators and the methodology, then a literature review in the field of innovation and broadband. Research continues with a quantitative analysis of the studied indicators: employment, the rate of HRST in total employment and broadband penetration rate in Romania in comparison with the European Union, in the period from 2007 to 2011.

**Material and Methods**

This paper analyses the recent Romanian economy from 2007 to 2011 in the European context with the help of the following analysis indicators: broadband penetration rate and the number of HRST. The data series used were taken from the European database, EUROSTAT.

Broadband penetration rate is expressed in percentage and it is calculated as number of fixed broadband subscription reported to the total population multiplied by 100. Population taken into account is the one registered at the 1st January of each year.

The indicator Human Resource in Science and Technology (HRST) includes, in a broad sense, everyone who has successfully completed post-secondary education (or is working in an associated S&T occupation) and in the narrow sense, it covers only those with at
least university-level qualifications in natural sciences or engineering (or working in an associated S&T occupation).¹

Broadband affects employment in three ways: “in the first place, network construction requires the creation of direct jobs (such as telecommunications technicians, construction workers and manufacturers of the required telecommunications equipment) to build the facility; in addition, the creation of direct jobs has an impact on indirect employment (such as upstream buying and selling between metal and electrical equipment manufacturing sectors). Finally, the household spending based on the income generated from the direct and indirect jobs creates induced employment.”²

Working methodology consists of a quantitative analysis of the indicators, a study of their dynamics during 2007 – 2011 and a construction of an econometric model which show how broadband penetration rate affects Human Resource in Science and Technology, and therefore total employment.

**Literature review**

Innovation is an important factor of the economic growth, of increasing the living standards and of the new economy. History shows that: “economic growth is not a simple repetitive process of adding factories and workers similar to those already existing; rather it can be said that it is and endless stream of inventions and technical jumps which lead to a substantial improvement of production possibilities of nations” (Samuelson and Nordhaus, 2000).

The importance of innovation was first highlighted by Joseph Schumpeter (1939). It represents the result of new combinations of existing resources and can take the form of new products, new production methods, new ways of organizing production, etc. This activity of combining the resources gives content to the entrepreneurship function, so the entrepreneurs can positively influence the economic growth.

In developing countries, technological process is achieved not only through their own innovations. Helpman (1993) highlighted that the imitation of the technologies used and created in developed countries have also an impact on the economic growth. Acemoglu and

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Ziliboti (2001) revealed the impact of complementarity between technological progress and labor skills on the long-run economic growth rate. Matsuyama (2001) in his study of economic fluctuations noticed that on the long run, the accumulation rate of production factors is equal to the rate of innovation, but the economy will alternate between periods of massive investment and periods of increased innovation rate.

Regarding developing countries, as is the case of Romania, the efficiency of international transfer of technology is constrained by: differences in productivity (Howitt, 2000), existing social infrastructure (Hall and Jones, 1999), various interest groups (Parente and Prescott, 1994), differences in skills and capabilities of workers (Acemoglu and Zilibotti, 2001) and insufficient own-funds to cover the cost incurred in transferring the technology (Aghion, Howitt and Mayer-Foulkes, 2005).

With a profound economic crisis in the background, actions must be taken to create a genuine single on-line market, based on broadband, for the benefits of the digital economy to be used to their full potential. Thus, the availability of high speed internet access to citizens and companies and increased use of broadband has been identified as a major objective of the European Union.

Broadband represents a set of technologies that allow rapid transmission of large amounts of data in order to ensure access to a range of digital services. A general definition of broadband is hindered by issues such as: the dynamism of technological innovation, the different level of development on various layers and the coverage level of network infrastructure.

The main advantage of broadband is that it enables the execution of activities in a new form. For example, working from home via electronic communication systems represents a solution to problems such as: unemployment, transport and environment. E-learning provides an alternative to traditional learning and makes the student independent of the time and space managed by specific institutions.

Among the benefits derived from broadband, are: supporting lifelong learning by removing social and geographical barriers; simplifying the relationships between companies, government and other organizations; new employment opportunities; more effective

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management which leads to increased efficiency and develops competitiveness.

**Results and Discussion**

The studied period, 2007 – 2011, is one of economic crisis and the analysis of the indicators reflects this. Table nr.1 presents the total employment, human resource in science and technology, broadband penetration rate and the rate of HRST in total employment in Romania.

**Table nr.1. Total employment, HRST and broadband penetration rate in Romania**

<table>
<thead>
<tr>
<th>Years</th>
<th>Total employment (Thousands)</th>
<th>HRST (Thousands)</th>
<th>Broadband penetration rate (%)</th>
<th>HRST in Total Employment (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>9,353,3</td>
<td>2,308</td>
<td>5</td>
<td>24,68%</td>
</tr>
<tr>
<td>2008</td>
<td>9,369,1</td>
<td>2,416</td>
<td>9</td>
<td>25,79%</td>
</tr>
<tr>
<td>2009</td>
<td>9,243,5</td>
<td>2,477</td>
<td>11.7</td>
<td>26,80%</td>
</tr>
<tr>
<td>2010</td>
<td>9,239,4</td>
<td>2,548</td>
<td>13.1</td>
<td>27,58%</td>
</tr>
<tr>
<td>2011</td>
<td>9,137,7</td>
<td>2,688</td>
<td>14</td>
<td>29,42%</td>
</tr>
</tbody>
</table>

*Source: Eurostat*

The chain based indexes were calculated in order to emphasize the change of the indicators compared to the previous year. In the Table nr.2 it can be noticed that: total employment in Romania increased slightly in 2008 compared to 2007, by 0.12%, but from 2009 it decreases with 1.4%, in 2010 with 0.1% and with 1.1% in 2011. But this situation is not encountered in HRST, here it is a growing trend. In 2008 the increase of the HRST was by 4.7%, in 2009 and 2010 it was recorded an increase with 2.6% and in 2011 with 5.5%.

The economic crisis from this period has left a mark on broadband penetration rate too, although it records an upward trend, the increases from year to year are dwindling. If in 2008 the rate increased by 80%, in 2009 the increase was 30%, in 2010 12% and in 2011 only 6.8% compared to previous year.
Table nr.2. Dynamics of the HRST and total employment in Romania (%; previous year = 100)

<table>
<thead>
<tr>
<th>Year</th>
<th>Index Total employment</th>
<th>Index HRST</th>
<th>Index Broadband penetration rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>2008</td>
<td>100,17</td>
<td>104,68</td>
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<tr>
<td>2009</td>
<td>98,66</td>
<td>102,52</td>
<td>130</td>
</tr>
<tr>
<td>2010</td>
<td>99,96</td>
<td>102,87</td>
<td>111,97</td>
</tr>
<tr>
<td>2011</td>
<td>98,90</td>
<td>105,49</td>
<td>106,87</td>
</tr>
</tbody>
</table>

Source: own compilation based on Eurostat figures

The share of HRST in total employment in Romania is increasing by 1% from one year to another, from 24.7% in 2007 reaches 29.4% in 2011, but still much lower than the EU average. This can be seen in Figure nr.1 and Figure nr.2.

Figure nr.1
Dynamics of the HRST and total employment in Romania

Source: own compilation based on Table nr.2

Things are similar also at the EU level, employment in the studied period shows a downward trend and in 2008 the total employment increased by 1.14% and then started to decline, in 2009 by 1.8% compared to previous year and with 0.5% in 2010. From 2011 employment started to slightly grow again by 0.36%.
Table nr. 3. Dynamics of total employment, HRST and broadband penetration rate in European Union (%; previous year = 100)

<table>
<thead>
<tr>
<th>Year</th>
<th>Index Total employment</th>
<th>Index HRST</th>
<th>Broadband penetration rate</th>
<th>HRST in Total Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>100</td>
<td>100</td>
<td>16.2</td>
<td>45.50%</td>
</tr>
<tr>
<td>2008</td>
<td>101.14</td>
<td>103.18</td>
<td>20.2</td>
<td>46.42%</td>
</tr>
<tr>
<td>2009</td>
<td>98.26</td>
<td>102.07</td>
<td>22.7</td>
<td>48.22%</td>
</tr>
<tr>
<td>2010</td>
<td>99.51</td>
<td>101.68</td>
<td>24.7</td>
<td>49.27%</td>
</tr>
<tr>
<td>2011</td>
<td>100.36</td>
<td>104.72</td>
<td>26.5</td>
<td>51.42%</td>
</tr>
</tbody>
</table>

Source: own compilation based on Eurostat figures

HRST have recorded, like in Romania, an upward trend. In 2008 increased by 3.18%, in 2009 by 2%, in 2010 by 1.6% and in 2011 by 4.7% compared to the previous year.

Dynamics of broadband penetration rate can be observed in Table nr.3, it has an upward trend, from 16.2% in 2007 to 26.5% in 2011.

The share of HRST in total employment in the EU recorded an upward trend, increasing in the studied period by 6%, from 45.5% in 2007 to 51.4% in 2011. Its dynamics can be seen in Figure nr.2

Figure nr. 2
Dynamics of the HRST and total employment in European Union

Source: own compilation based on Table nr.1

Even though the broadband penetration rate is increasing in Romania, only a relatively small proportion of the population has access to high speed internet. Unlike most European markets, where broadband services are provided by a dominant company, in Romania supply is
diverse, with a large number of cable operators (Romtelecom, RDS and UPC) and "neighborhood networks"\(^4\).

Access to broadband infrastructure in Romania is relatively cheap in many urban areas and "Due to the fiber networks these connections also have very high speeds - only 2% of the connections in Romania are below 2 Mbps, 53% of connections have speeds between 2-30 Mbps, 29% have speeds between 30-100 Mbps and 16% of connections have speeds of at least 100 Mbps"\(^5\)

**Figure nr. 3**

**Dynamics of the broadband penetration rate in Romania and EU**

![Graph showing broadband penetration rates](source)

*Source*: own compilation based on Table nr.1 and Table nr.2

Dynamics of broadband penetration rate in Romania and in the European Union can be seen in Figure nr.3. The upward trend is clear, the rate increased from 5% in 2007 to 14% in 2011 in Romania and from 16.2% in 2007 to 26.5% in 2011 in the European Union. The difference between broadband penetration rate in Romania and the average of EU is still high, reaching a difference of 12% in 2011, therefore more aggressive measures are needed to expand the coverage of broadband, especially in rural areas.

Due to the low rate of broadband penetration rate in Romania, its influence on total employment is insignificant, that is the reason the HRST indicator was chosen.

The way in which HRST is influenced by broadband penetration rate was calculated with the aid of a regression, through a unifactorial econometric model with the following form:

\[
\text{HRST} = \alpha + \beta \cdot \text{Broadband} + \varepsilon
\]  

\(4\) are private companies, low cost with a small group of customers.

\(5\) http://www.itu.int/ITU-D/treg/broadband/BB_MDG_Romania_BBCOM.pdf
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Figure nr.4

The influence of broadband penetration rate on HRST

<table>
<thead>
<tr>
<th>SUMMARY OUTPUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression Statistics</td>
</tr>
<tr>
<td>Multiple R</td>
</tr>
<tr>
<td>R Square</td>
</tr>
<tr>
<td>Adjusted R Square</td>
</tr>
<tr>
<td>Standard Error</td>
</tr>
<tr>
<td>Observations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ANOVA</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>Significance F</th>
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</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1</td>
<td>71174.4</td>
<td>71174.4</td>
<td>21,081</td>
<td>0.01341</td>
</tr>
<tr>
<td>Residual</td>
<td>4</td>
<td>10128.8</td>
<td>2,532.2</td>
<td>6,082</td>
<td>6,082</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>81,303.2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Standard Error</th>
<th>t Stat</th>
<th>P(&gt;)</th>
<th>t-Value</th>
<th>P(&gt;)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>2100.2</td>
<td>98.256</td>
<td>28.179</td>
<td>0.0002</td>
<td>1815.32</td>
</tr>
<tr>
<td>Broadband</td>
<td>36.669</td>
<td>7.98655</td>
<td>4.59139</td>
<td>0.0134</td>
<td>11.2525</td>
</tr>
</tbody>
</table>

Source: own compilation based on Eurostat figures

In the econometric model (Figure nr.4) it can be seen that: Multiple R is 0.93, which shows a very strong link between the HRST and the broadband penetration rate; R Square is 0.87, meaning that 87% of the HRST variation can be explained by the influence of broadband penetration rate; the resulting F value is 21,081, higher than the critical F value (6,38), which means that the econometric model is correct; the t Stat value associated with α is 23,79 and t Stat associated with β is 4,59, higher than the critical t value (2,77).

This model shows a strong link between the HRST and the broadband penetration rate thus, the unifactorial econometric model in the case of Romania between 2007 and 2011 has the following form:

HRST = 2100.2 + 36.67*Broadband

(2)

If Broadband penetration rate increases by 1%, HRST increases with 2136.87 thousand persons, there is a direct relationship between the studied variables.

Conclusion

The main results were:

1. Broadband penetration rate in Romania follows an upward trend, from 5% in 2007 to 14% in 2011, but still remains one of the lowest in the European Union. Many reasons led to this situation: late market liberalization that took place in 2003, late launch of DSL
(technology and equipment used in telephone networks to ensure access to a high speed digital network on twisted copper wires) at the end of 2005; reduce use of personal computers, a reduce area of broadband services and low income, especially in rural areas.

(2) Broadband penetration rate contributes to employment growth, both as a result of network construction and to the spillovers that have an impact on the whole economy. Implementation programs are focused on construction and telecommunication sector but the impact of the spillovers is higher in financial sector, education and health, which are included in the field of HRST.

(3) Although broadband penetration rate is low compared to the other EU countries, the access to infrastructure is relatively inexpensive in many urban areas and has high speed connexions.

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"This work was partially supported by the strategic grant POSDRU/CPP107/DM1.5/S/78421, Project ID 78421 (2010), co-financed by the European Social Fund – Investing in People, within the Sectoral Operational Programme Human Resources Development 2007 – 2013."

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http://www.itu.int/ITU-D/treg/broadband/BB_MDG_Romania_BBCOM.pdf
The Evolution of the Romanian Agriculture during the post accession Period, from the perspective of the Common Agricultural Policy

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Abstract
The transition from a planned economy to a market economy involved a series of changes in all branches of economic system, the agriculture also supporting this process. The starting point of the transition has placed our country in one of the most difficult situations due to excessive centralization of the before 1989 period, to a significant gap with developed countries, to an energetic intensive structure of the hole economy etc.

Accession to the European Union in 2007 and the rallying to the Common Agricultural Policy are very important elements that can lead to a new perspective on the Romanian agriculture.

Keywords: agriculture, Common Agricultural Policy, development, structural funds

Introduction
Agriculture is one of the areas where the reform process began in 1991, when the Land Law 18/1991 was enacted. There was a quick transition from the cooperative-type organization to various forms of private organizations: individual holdings, agromec type companies, agricultural companies, private or public companies. In the first period of the implementation of the Law Land there has been a strong
fragmentation of the agricultural land, getting to over 4.7 million of agricultural exploitations and round 18-20 millions agricultural plots.

This situation has relatively quickly balanced, so that now, the statistics show a 48 percent of the arable land consists of farms over 100 hectares, these farms being able to generate an efficient activity by raising the labor productivity and the profitability.

However, the statistics still show a large discrepancy between the results obtained in Romania and the European Union average.

**Material and Methods**

We tried to realize in this paper a comparative analysis of the Romanian and European Union agriculture evolution, on the basis of statistical data provided by the National Institute of Statistics and Eurostat, summarizing findings and proposing solutions for the future development of the Romanian agriculture. Quantitative and qualitative analysis of the data allows capturing quantitative and qualitative dimensions of economic phenomena and processes.

Statistical analysis of the data allowed a clearer emphasis of the current situation but also of the next trends and developments.

We presented at the beginning of the paper a brief logical-historical research to discover causes and movement direction of the analyzed economic phenomena and processes.

**Literature review**

We studied bibliographic materials referring to the approached subject that can be structured by three directions:

- field literature, underlining here the 2010 report of Douglas K. Knight – “Romania and the Common Agricultural Policy – the future of the small Romanian Agriculture in Europe” and also the analyzes made by Alexandri Cecelia and Luca Lucian and some others papers that are mentioned in the bibliography;

- legislation, developing plans and programs made by the national and European Union institutions;

- statistics conducted by national and international institutions (National Institute of Statistics, The Ministry of Agriculture and Rural Development).
Analysis and Interpretations

According to the data presented in the weekly Economist, Romanian agriculture degree of compatibility with the European Union 15 agriculture in the years 2009 and 2010 was rather low.

Here are a few landmarks suggesting that by the point of view of the agricultural performances and of rural development, the real state of Romania agriculture nowadays is similar to the state of EU6 countries during 1957–19621:

- primary production value per hectare obtained by the Romanian farmers (about 800-900 €/ha) is two – two and a half time smaller in comparison to the one obtained as an average by EU farmers (1,800-2,000€/ha);
- intermediate consumption, as an expression of financial sustaining level of manufacturing technologies, of the structure and intensity degree agricultural production with direct impact on yields at EU states level, is registering large disparities from one country to another. Thus, Romania has an intermediate consumption of 715 euro/ha, compared with Holland – 8,369 euro/ha, Belgium – 3,987 euro/ha, Denmark – 2,843 euro/ha.
- the gross value added in Romanian agriculture is half the EU15, which leads to a final agricultural production of about 1,400-1,500€/ha in Romania from 2,400-2,600€/ha in UE15;
- food self-consumption in Romanian subsistence farms is 90-92% from their production and in case of the semi-subsistence farms the self-consumption is 50-52% (compared to 10-12% in EU15), this state resulting in a value of commercial agricultural production of de 400-420€/ha in Romania, four times lower than in the EU15;
- agricultural yields (average productions) realized in Romanian farms during 2000 – 2008 of 2,500 kg/ha are at the level of the EU6 yields realized in the 6-th decade of the last century;
- the equipments of a Romanian farmer in comparison to the one of a EU15 farmer is about 25-26 times lower (9,000-9,200€ in UE; 350€ in Romania)
- bank loans for European farms are 15-16 times higher than those granted for Romanian farms (1,700-2,000€/ha in UE, 110€/ha in Romania);

1 The Economist, No. 7 (New Series), 7th of March 2011
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- resting an average arable area for the last 10 years of 1,150 thousands ha/year (40 thousands ha in 2002; 2,300 thousands ha in 2009 and about 3,000 thousands ha in 2010), representing an average loss of agricultural production of 1,050 millions € (290 mill. € in 2002, 2.165 mill. € in 2009 and 2.900 mill. € in 2010);
- banning the cultivation of genetic modified soy since 2005 (condition too easily accepted during the negotiations for EU acceding), has caused a 330 mill$/year loss for Romania (about 2 billions $ during 2005-2010), of which about 150 mill. $/year for imports of genetic modified soybeans and soybean meals from USA, Argentina and Brazil;
- rehabilitation of irrigation systems on about 30-35% of the total irrigated area but their functionality on an average surface of only 280,000 ha/year (9-10% during 2000-2009);
- the consequence of non-performances in Romanian agriculture is reflected in the extremely high proportion of imported food expenditures (42.9% in 2008 and 39.8% in 2009) and the share of foods imports in the total food consumption (25.1% in 2008 and 21.8% in 2009).

Labor productivity is also relevant for expressing the dimensions of disparities in agriculture.

**Table no. 1**

Average labor productivity in agriculture (lei/occupied person)

<table>
<thead>
<tr>
<th>Year</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>UE 27</td>
<td>12801.71</td>
<td>13368.40</td>
<td>14820.15</td>
<td>15021.04</td>
</tr>
<tr>
<td>Romania</td>
<td>2176.35</td>
<td>2672.98</td>
<td>2531.60</td>
<td>3045.73</td>
</tr>
</tbody>
</table>

*Source: Processed data extracted from Romanian Statistical Yearbook 2010 and Eurostat - http://epp.eurostat.ec.europa.eu*
These major differences are due to lower productions in our country and to the high percentage of occupied population in agriculture. However, there is a slight increase in the productivity level and also, the statistics show a decrease of occupied population in agriculture (from 43.5% in 2001 to 30% in 2008\(^2\)).

Romania’s accession to the European Union in 2007 meant the acceleration of economic and social convergence in order to integrate in all levels. So, agriculture entered in a new phase of its post-revolutionary evolution by harmonizing national policies to the Common Agricultural policy. This is among the first common policies adopted by European Union, having its origins in the Treaty of Rome in 1957 (at that time was the European Economic Community).

Currently, the Common Agricultural Policy is based on two pillars:

1). Common market organizations – being targeted here measures referring to direct payments and market-related subsidies granted to common market organizations such as purchasing products for public deposits, surplus recovery schemes and exports subsidies. Funding for Pillar 1 comes from the Guarantee Section of European Agricultural Guidance and Guarantee Fund (EAGGF).

2). Rural development – the measures deal with environment protection, supporting the disadvantaged areas, promoting the food

quality, respecting the standards, animal welfare. Measures under this pillar are co-financed by the European Union and the member states.

The agriculture represented Chapter 7 on the EU adhesion negotiations, this chapter being opened in 2002. During 2002-2003 period, there were several steps taken in order to approach the national and the UE agricultural policy. We can mention here some important elements:

- Enactment of the Law on organization and functioning of the markets for agricultural and food products (Law no. 73 of 2002)
- Creating the Farm Accountancy Data Network;
- Enactment of some provisions regarding ecological policy;
- Accreditation of SAPARD Agency, on 31st of July 2002, which immediately started its financing activity through the pre-adhesion funds;
- Finalizing in February 2003 of the Agricultural and Rural Policy for UE adhesion.

Since 2007, once with the accession to European Union, the unique payment scheme on surface was applied. It involves a ten years period for harmonization of the payments level with those existing in EU-15, exactly the same way happened with the ten states that joined EU in 2004. Romania will reach 100% of the EU-15 level for unique payments on surface in 2016, according to next schedule:

<table>
<thead>
<tr>
<th>Year</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of the payments leveling EU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NSM 10</td>
<td>25</td>
<td>30</td>
<td>35</td>
<td>40</td>
<td>50</td>
<td>60</td>
<td>70</td>
</tr>
<tr>
<td>Romania and Bulgaria</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>25</td>
<td>30</td>
<td>35</td>
<td>40</td>
</tr>
<tr>
<td>% of the payments leveling EU</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NSM 10</td>
<td>80</td>
<td>90</td>
<td>100</td>
<td>100</td>
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<td>100</td>
<td></td>
</tr>
<tr>
<td>Romania and Bulgaria</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>80</td>
<td>90</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Source: UE delegation in Romania
Another important post-accession issue is regarding the structural funds for agriculture development. The funding for agriculture is coordinated through the European Agricultural Fund for Rural Development, a funding tool that sustains the implementation of the Common Agricultural Policy. In Romania the programming of the rural development is based on Romania’s National Strategic Plan for Rural Development which is reflected in this period by the National Rural Development Program 2007-2013.

The coordination of the supporting measures through the National Rural Development Program is focused around four important axes:

- **Axis 1 “Increasing the competitiveness of agriculture and forestry”,** aiming an improvement of the agriculture and forestry efficiency for preparing these fields to deal with the specific competition in an open trade environment. Support will be directed to SMEs, considered to be more capable to develop new products, to better exploit the local resources by innovation and adaptation than the large enterprises. Chosen priorities under this axis take into account the needs of development, but also the necessity of continuing some pre-accession measures.

- **Axis 2 “Improving the environment and the rural areas”** – general objective of Axis 2 measures is to improve the environment in the rural areas and to preserve biodiversity through a sustainable management of agricultural and forestry land. The measures of this axis also encourage the implementation of some measures to protect the soil against the erosion processes (e.g. extending green crops).

- **Axis 3 “Life quality in rural areas”** – strategic objectives of this axis consider improving the life quality in rural areas, diversification of rural economy, promoting knowledge and improving human potential. The measures of this axis generally aim the rural collectivity and especially the development of rural enterprises, based on natural resources, tourism, development of the villages and environmental initiatives to supplement the farm measures and provide alternative employment opportunities for the population within the rural areas. These measures were chosen in accordance to the weaknesses of rural environment (low incomes, excessive dependency on subsistence agriculture, low entrepreneurial skills, inadequate infrastructure) and strengths identified in Romania (high value natural resources, rich cultural heritage, etc.).
• Axis 4 “LEADER” – tries to support rural development by improving local governance and promoting the endogenous potential. LEADER approach will help achieve the objectives of Axis 1, Axis 2 and Axis 3 through integrated local development strategies and innovative actions.

These funding axes have got less interest from farmers in the beginning, but since 2011 there were a large number of applications, that mean lots of contracts and attracted funds.

There are of course a number of deficiencies in carrying out these operations such as: excessive bureaucracy, lack of co-funding capacity, blocking of some funding contracts already signed because of additional requests of credit institutions, lack of coordination from the involved institutions, difficulties in developing the farms due to the lack of market and the competition of foreign products etc.

On the other hand, applying the Common Agricultural Policy by the unique payment scheme on surface did not stimulate the competitiveness, because a lot of agricultural workers activate in small farms.

Conclusions

The conclusions that we can draw after analyzing the implementation of Common Agricultural Policy in Romania should emphasize both the positive aspects that generated an evolution of the agriculture and the negative ones generating stagnation.

Thus, although the unique payments on surface didn’t support the small farms to move from the self-consumption phase to that of producing goods for local, regional or even national and European markets, they helped these farms maintaining around the break-even point.

With the launch and popularization of the structural funding, many farmers (thousands) came to apply for funding through one of the four axes mentioned below and at the same time they have to develop their farms as main objective of the received funding.

Another important issue refers to the Common Agricultural Policy reform for period 2014-2020, year 2013 being decisive in this respect. Romania will have to be actively involved in debates on the subject, pleading for further funding in all areas related to rural development and also for unique payments on surface that should reach the EU15 level. In essence the debate is between “Who benefits from
CAP and does not want to see it destroyed?” versus “Who does not obtain a net benefit from CAP and want it to be reduced or radically reformed?” The debate started in EU since when the CAP was firstly applied and the new member states joined this debate on different positions depending on how they see the agriculture in their history and in their future. The debate classically started between Great Britain and the Nordic countries on one hand and France, Germany, Italy and other major agricultural countries, on the other hand. These are broad categories and many countries may not fit completely in one or another.

In planning the CAP there are taken into consideration the special nature of agricultural activity that comes from the social agricultural structure and from structural and natural disparities; the needs to make gradual changes and especially the fact that in the EU member states, the agriculture is a sector closely related to the hole economic system. At the time of accession, the impact of agricultural prices was smaller on the consumers than the one on the producers, in our country. Immediate real income losses will be mainly felt for two family types: the poorest ones and the ones living in urban areas, which do not produce foods for self-consumption. To fully benefit from the advantages of applying CAP, Romania’s agriculture should follow the next objectives:

- Reducing the number of agricultural workers, offering them alternative jobs and income sources;
- Creating efficient economic farms, reducing the fragmentation degree of land using;
- Developing infrastructure and some specific rural services;
- Raising the institutional-administrative capacity of obtaining funds and valuing the local resources.

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The Economic consequences of Mitigation of the Population aging through the Fiscal Policy

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Abstract
The aim of this study is to explore in what extent does the increase of the number of productive population by using immigrant labour force represents a possible solution for the USA and the EU member states, which could weaken the effects of economic consequences of aging. This issue is relevant also because the USA and the EU member states have been amongst the most popular destinations of international migration. Therefore, these two subjects can or will have to choose from potential immigrants, as the number of them coming to these countries is much higher than America or Europe want to accept (just think of more than a million arrested illegal migrants in these countries every year). We can claim that the ongoing economic reforms in western countries (e.g. the French retirement reform, the German reform of the labour market) and creation of immigrant policies, economic benefits of migration to decrease problems caused by aging, are positive. Slow speed is typical for them, accompanied by resistance of inhabitants and fear of the consequences of political decisions. The direction is correct, but sometimes the speed is not. Furthermore, problems with applying the law can occur, along with breaking the immigration laws and a series of repeated amnesties are
The economic consequences of mitigation of the population aging through the fiscal policy

good practical examples of that. Faster speed and prompt decisiveness are expected from the politicians.

**Keywords:** fiscal politics, immigration, economic reforms, aging

**Introduction**

Population of the developed countries ages very fast. The birth rate has significantly decreased during the past decades and the fertility rate (i.e. the average number of children born per mother) decreased under reproduction rate (2.1) in all developed countries. At the same time the average life expectancy has been increasing and people keep living longer. The percentage of old people (above 65 years old) in population has been constantly increasing in the past decades and demographic prognoses indicate further rapid increase in the number of old people. The number of people in productive age (14-65) in developed countries cannot keep up with this increasing trend. On the contrary, in many countries the number of active people will be at a standstill, or even decrease. *Old-age dependency ratio* (i.e. number of people in productive age falling on one person older than 65) has significantly decreased in Europe and America since 1960, and this trend will continue further. It is a big challenge for huge public systems of social benefits (retirement system, health care) using the system of continuous financing. These systems work on the basis of intergenerational solidarity, meaning that retirement pension and expenses on health care for the present day OAPs are covered by levies of the working people. If the number of supporters and receivers declines, the growing public expenses on retirement pensions and health care have to be covered by levies of the constantly decreasing number of the working people. In 15 member states of the European Union (in 1995-2004) the percentage of public expenditure on retirement pensions expressed as GDP in 1960-2000 increased from 6% to 12% and if no significant change in demographic trends, economic processes and retirement system takes place, it can reach the unpayable level of 20%. Aging and economic problems connected with it represent one of the biggest challenges for developed countries.

One of the potential ways of balancing the increasing expenses connected with negative demographic trends and aging is represented by substitutive migration, i.e. replacing a part of population in
productive age by immigrant labour force. This could help to preserve big public systems of social benefits. The aim of this study is to explore in what extent does the increase of the number of productive population by using immigrant labour force represents a possible solution for the USA and the EU member states, which could weaken the effects of economic consequences of aging. This issue is relevant also because the USA and the EU member states have been amongst the most popular destinations of international migration. Therefore, these two subjects can or will have to choose from potential immigrants, as the number of them coming to these countries is much higher than America or Europe want to accept (just think of more than a million arrested illegal migrants in these countries every year.)

In connection with the current political measures a question occurs, who to give preference to, whether to choose from potential immigrants. If the main target is to maximize economic benefits for the host country – and that is what according to my opinion we should aim at – then it is necessary to take such steps that would bring positive fiscal balance. That means that the income to the state budget coming from immigrants will exceed public expenses related to immigration. In that case, immigration would increase the income of the host country and its inhabitants, it would generate more income to the state budget and would so reduce fiscal burden caused by population aging. Therefore, the most important part of the study is to explore the fiscal balance of immigration. And it is even more important to answer the question, which are the most important factors influencing fiscal balance and whether these increase or decrease its closing balance.

The basis of the analysis are assumptions of fiscal balance of immigration by several authors (e.g. Borjas [2001], Camarota [2004], Ekberg [1999], Gott and Johnston [2002], Smith and Edmonston [1997]). On the basis of the results of their research and relying on their assumptions on fiscal balance, I have framed criteria for the analysis of immigration expenses and income. On the basis of these criteria and available statistical data we analyzed the immigration in the USA and the EU during the past decades.
Methods used during the research

In the framework of the study we proceed from the assumption that if the age structure and unemployment rate of immigrants as well as their taxing terms are more favorable than those of the host country inhabitants, we can expect a positive fiscal balance of migration. As the condition of age structure is in all countries fulfilled, we can refrain from it. So the main hypothesis of the study is that fiscal balance of the labour market performance of immigrants, their income and social benefits are closely connected with consumption function.

The higher the employment rate of immigrants is, the higher the average income gets, the consumption gets higher and their demands for social benefits decreases in comparison with the majority of population, the fiscal balance of migration is positive, the average salary is higher, social expenses are lower by most of the inhabitants, and so the fiscal balance of migration becomes positive.

In this case migration causes increase in the income of the host country and its inhabitants, which overbalances the budget and decreases the burden caused by aging of the inhabitants. In the study we try to prove the assumptions connected with fiscal balance policy relying on secondary data. While conducting the survey and relying on scientific literature and elaborating all available statistical data, with their further examination relying on the positives of fiscal policy, economic contribution to the host country and instability caused by aging, we can claim that all these contribute to moderating the immigration criteria. We confront the criteria in the United States and in the European Union during different time periods and phases of the immigration waves. We point out that some of them had a positive (or negative) impact on fiscal balance and what were the basic reasons for the actual situation.

On the basis of the criteria we will also make political suggestions which might be used while creating immigration policy with the aim to make them more effective and profitable for the host country. The presented study has a comparative character; it compares the United States and the European Union according to the above mentioned criteria, while still taking into consideration the member states of the EU, which often show significant differences. The study is directly aimed at static fiscal balance, which has two sides – the revenue side and the expenditure side. On the revenue side there are all taxes and
fees paid by immigrants during a fiscal year. On the expenditure side, the expenses of immigrants are paid from public budget together with social benefits of immigrants in the framework of social care (state paid public school system, health care) and also full expenses of public expenses. Apart from that, on the expenditure side, expenses of immigrants connected with their actions are also included (such as judicial proceedings with criminals, expenses connected with arresting prisoners or illegal immigrants and refugees paid from public expenses.)

Immigrants indirectly influence public revenue and expenses via economic effect of migration. Primarily we can perceive immigrants as a productive factor (work, capital) influencing supply and price, as well as employment, whilst the growth of production is accompanied by the increase of indirect fiscal effects. Apart from that, the influence of a certain group of immigrants on fiscal balance can differ under the influence of time flow. A need for dynamic support of fiscal balance for a longer period of time can occur there. On the basis of the fact that there are too many uncertainties in the analysis of fiscal balance and in taking into account indirect effects, which are also difficult to identify and in many cases contradictory and the results are often disputable, we therefore concentrate on short-term static assumptions. We can justify this also by the fact that aging has increased public expenditure and from the balance point of view the current fiscal balance is decisive (it can take into account under the influence of aging in a short time the growing state expenses on social policy), which primarily the tax payers and law-makers of the host country are interested in.

Results
Problems connected with aging of the population in Europe and America

Demographic factors, effects on the labour market and growing „generosity” of public retirement systems (growing proportion of expenditure ratio towards GDP) lead to the growth of public expenses on retirement pensions in proportion to GDP from 1960 until 2000 in the United States in the amount of 4% to above 7%, in the 15 EU member states from 6% to 12%.

In the context of economic burden coming from the population aging the situation in the United States is much more favourable than in Europe: the population is young, the birth rate significantly exceeds the
European average, the number of employees grew faster than in Europe in the past decades and the state retirement system is not as „generous“ as in the 15 EU member states. Apart from that, in the United States there are only two thirds of the pensioned retirement covered by financial resources of funds created within the framework of the retirement system, while this represents only 40% of the total amount of retirement pensions (the rest comes from private retirement funds and other savings, work income and investments). Within the 15 EU member states the state redistribution system fully covers 55-60 % of the pensioned retirement. The 15 EU member states population is much older, the birth rate is lower, the number of employees grew slower, a more generous retirement system is applied and there is also a much more significant dependency on the retirement system than in the USA. This implies that if more developed countries wanted to solve the issue of retirement system via migration, the dependency of the 15 EU member states would be much higher. From a purely demographic point of view, when we take into consideration the proportion of the economically active population (15-64 years olds) and the amount of OAPs dependant on retirement pensions - even so the EU countries are more dependable on a higher number of immigrants. Obvious differences are visible among the European countries, from the oldest generation and lowest production point of view, the most dependant countries on migration are (e.g. Italy, Germany), while the least dependant countries are those with a higher birth rate (such as France or Ireland).

**Labour Market in the United States and the European Union**

Replacing inhabitants in productive age by immigrants has its effect only in that case when the immigrants work legally, pay taxes and transfer payments and so contribute to public expenses, and also to higher demand for pensioning the retirement caused by aging of the population. Taking into account alternative migration and the fiscal balance point of view, it is crucial what job offers the labour market in the host country offers and what measures are there on the labour market concerning immigrants in the field of employment, or unemployment.
In years 1990 and 2006 the employment rate in the United States was higher; respectively the unemployment rate was lower than in the European Union. Apart from that, the number of new working positions was higher and they showed a much higher mobility of labour force. The employment rate in the European Union was lower when compared to the United States only because women, the young and older generation showed lower employment rate.

Within the EU member states there were significant differences. In Denmark, the United Kingdom, the Netherlands and Sweden the employment rate in 2000 exceeded the so-called Lisbon criteria (employment rate 70%) and the United States was on a similar level. In some countries the number of working positions grew dynamically. In Ireland, the United Kingdom, the Netherlands and Spain the number of new working positions grew significantly in one decade. (In years 1993 – 2003 in the 15 EU countries 15.5 million working positions were created, the half of which - 8.3 million - in the four above mentioned countries.) The Union average within the Euro zone is influenced by indexes of the three biggest countries, i.e. Germany, France and Italy – they contributed with more than a half to the Union GDP, and with two thirds to indexes of economic development within the Euro zone.

The unemployment was at a standstill in these countries, or it did not grow at a particular speed, whilst a structural 10% unemployment rate, which is not dependent on conjunctive cycles, developed. The main reasons for this could be: rigid labour market burdened by many laws and regulations, high tax and transfer payments burden of the working people, overdrawn and in many cases frustrating social benefits, high transfer payment burden caused by population aging, stronger influence of trade unions and their stronger power within applying employment policies, different social preferences (preferring free time, lower mobility and lower willingness to run a business). In these countries it was necessary to adopt the following reform measures: liberalization of the labour market, lowering tax and transfer payment burden, making the policy of social benefits more effective, supporting the creation of new working positions, business and mobility support. These reforms were applied very slowly, as they had to cope with social resistance during the process of their implementation.

The employment rate indexes of people of the Hispanic origins born abroad and in the United States, along with the two biggest immigrant communities from Asia and Latin America, do not differ
The economic consequences of mitigation of the population aging through the fiscal policy

significantly. The situation is mostly the same in Europe. There are important differences between the EU inhabitants and immigrants, which represents a growing problem, as the number of immigrants from the Third world keeps growing mostly in the border areas of Europe. During the recent years the unemployment rate of the immigrants from the Third world in Europe has been two or three times higher than the average unemployment rate of the biggest host country, the employment rate was lower in 10 – 30 percentual points than by most of the home population. Generous frustrating social benefits significantly contribute to the European problems of the labour market together with the number of immigrants not coming from the index of real demand.

Immigration and Social State

Immigrants in the United States receive social benefits in a much larger extent and they also use social benefits much more than home inhabitants. And that despite the fact that America belongs to the states with the mostly restrictive system of benefits and the accessibility of immigrants to social benefits is also determined. In the European Union social benefits bound to claimable benefits connected with immigration largely exceed the amount of used benefits in the United States. Firstly, there is no provable evidence of differences in the labour market ratio in the United States, the unemployment rate of immigrants in the EU countries is twice as high as the unemployment rate of home inhabitants and the employment rate is more than 10 % lower. Apart from that, the period allowing somebody to receive social benefits in Europe lasts longer. Secondly, the EU member states – mostly countries of the continent and Scandinavia – use a much more diverse and generous social system compared to America. The United States is the only industrially developed country, which has no overall state guaranteed and state paid system of health care, it is the only democratic state, which does not offer children benefits to all families and it is one of the two OECD member states (the second being Australia) where there is not a paid maternity leave. Thirdly, in all EU member states, except one or two exceptions - in contrast to the United States – they do not limit by criteria the access of immigrants to social benefits. In conclusion, in Europe the birth rate of immigrant women from the countries of the Third world exceeds the common level typical for Europe, whereas such differences are not present in America. This causes that social expenses
within the EU are significantly higher than those connected with immigration in the USA.

The Structure of Immigrants

In developed countries - except several Anglo-Saxon countries - migration has been taking place since the 90’s in three main waves, and that in the framework of family integrations, accepting refugees and illegal form of migration, which we state in the following table:

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<tr>
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<tbody>
<tr>
<td>Australia</td>
<td>45</td>
<td>55</td>
<td>47</td>
<td>33</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Canada</td>
<td>18</td>
<td>26</td>
<td>64</td>
<td>62</td>
<td>18</td>
<td>12</td>
</tr>
<tr>
<td>The United States of America</td>
<td>10</td>
<td>19</td>
<td>75</td>
<td>70</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>Denmark</td>
<td>20</td>
<td>22</td>
<td>60</td>
<td>53</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>France</td>
<td>27</td>
<td>20</td>
<td>58</td>
<td>69</td>
<td>15</td>
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</tr>
<tr>
<td>Sweden</td>
<td>2</td>
<td>2</td>
<td>62</td>
<td>65</td>
<td>36</td>
<td>33</td>
</tr>
<tr>
<td>Switzerland</td>
<td>47</td>
<td>55</td>
<td>51</td>
<td>42</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>The United Kingdom</td>
<td>49</td>
<td>54</td>
<td>42</td>
<td>35</td>
<td>9</td>
<td>11</td>
</tr>
</tbody>
</table>


In years 1973-74 migration in Europe took place, which mostly consisted of temporary employees, while migration within family integration nor illegal did not take place according to the market needs. As immigration did not reflect that way the real actual need of the labour market, demand did not meet supply, respectively supply partly exceeded demand. A larger number of immigrants with such completed education arrived; who were not placeable on the labour market, respectively the supply exceeded the demand in that specific field. Apart from that, laws in many countries (France, Italy, Ireland, Denmark, Sweden) did not allow – or just very rarely – to employ (Germany, Austria, Spain) while the application for a refugee status was still being processed. In many cases this process could last for years. If the applicant was not allowed to keep a gainful occupation, he/she gradually lost motivation and could basically build a life on social benefits. In the 1970s, in the United States and also in all European countries the level of education of immigrants gradually decreased
The economic consequences of mitigation of the population aging through the fiscal policy

when compared to that of the host country, the difference between these two indexes continually increased. That, of course, contributed in a large extent to differences in the growth of income and the growth of social benefits paid to immigrants.

**Factors influencing fiscal balance**

The most important determiners influencing fiscal balance if immigrations are stated in the following table:

**Analysis of expenses – revenue from immigration:**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Revenue gained by immigration exceeding expenses connected with migration and economic benefit weakens the problems caused by aging</th>
<th>Revenue from immigration exceeding expenses connected with migration but do not show any economic benefit, on the contrary, they aggravate the problems connected with aging</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Situation on the labour market</strong></td>
<td>High employment and low unemployment rate</td>
<td>Low employment and high unemployment rate</td>
</tr>
<tr>
<td><strong>Dynamics of the labour market</strong></td>
<td>Growth of employment, decrease of unemployment</td>
<td>Stagnancy or decrease of employment, growth or stagnancy of unemployment</td>
</tr>
<tr>
<td><strong>Social system</strong></td>
<td>Restrictive social system</td>
<td>Generous social system</td>
</tr>
<tr>
<td><strong>Accessibility of immigrants to social benefits</strong></td>
<td>Accessibility of immigrants to social benefits is limited</td>
<td>Immigrants share the same, or similar rights as home population when concerning accessibility to social benefits</td>
</tr>
<tr>
<td><strong>Structure of immigrants</strong></td>
<td>Legal workers and family members</td>
<td>Illegal immigrants</td>
</tr>
<tr>
<td><strong>Level of education of immigrants</strong></td>
<td>The level of education is not diametrically different to the level of education of home population and language ignorance does not represent a handicap on the labour market</td>
<td>Immigrants often do not have education, or just a basic one, they do not speak the language of the home population on the desired level</td>
</tr>
<tr>
<td><strong>Social-cultural and family model of immigrants</strong></td>
<td>Position of women in countries of the immigrant origins does not differ from the one accepted in western countries, the average number of offspring does not exceed the average number of offspring in families of the home population in the host country</td>
<td>In the countries of their origin women take important positions in family care, the average number of offspring exceeds the average number of offspring of the home population</td>
</tr>
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On the basis of the above mentioned criteria we can explore and analyze particular development stages of migration waves, respectively the revenue and expenses of individual groups of immigrants and so deduce fiscal balance.

### Fiscal Balance in America and Europe

During the main migration waves to America (1880 – 1924) the fiscal balance and economic impact were positive. The reason for this was that the current social system in synergy with social benefits did not exist; therefore social benefits connected with immigration were minimal. At the same time, American economy showed dynamic growth, a large number of working places were formed, which immigrants could take.

In 1955 and 1973-1974 migration for work in Western Europe had a similar positive effect, thanks to that there were single men (without family members) coming like immigrants to particular working positions. Their accessibility to a forming social system was significantly limited (if they lost work, they went back home, did not get social benefits in unemployment) and did not influence members of their households either. Until the first oil crisis, during the „economy miracle“, German, French and even the economy of the Benelux states showed a dynamic progress, with a dynamic creation of free working positions, where immigrants were widely accepted, while the number of unemployed was minimal, we can practically speak of full employment.

After the second migration wave (1965 – until now) evaluation of the impact in the United States is much more complicated. Most of the estimated financial amount (on the level of national economy) is slightly positive or negative, from American GDP it grew from 0.1 to 0.25 percent from net income but we can also say that it nearly reached zero balance. The tax income balance sheet showed that the American economy still dynamically continued in creating new working places, the employment rate was high, the unemployment low and the unemployment rate of immigrants did not significantly differ from the one of the home population. The final contribution was weakened by the
fact that a large number of immigrants had low qualification and income and therefore (in view of low tax burden) they paid low taxes.

On the expenditure side we could observe the fact that low qualification and low income of immigrants, along with earning a living for family members, lead them to claim more often for social benefits and social service. For that reason, the American government tried to imply restrictive measures concerning accessibility to social benefits, as the living standards of immigrants were not very different from the home population’s (the majority of women worked and there was the same number of children in families).

A large amount of expenses can be linked to refugees and illegal immigrants, while the majority of income is created mostly by the income of qualified legal immigrants, and that is the reason why there is always a positive migration balance of legal immigrants (primarily if we do not take refugees into consideration) in America. Obviously, with the help of special migration programs, highly qualified immigrants came and through high income and taxes positively influenced the migration balance. Qualified Asian immigrants also positively influence the migration balance (there is mainly a higher number of them among the Indo-Chinese).

Migration taking place in 1973 and 2006 from Africa and Asia to Western Europe according to the set criteria differs in all points from the American one; therefore the fiscal balance was negative – except the United Kingdom and Ireland, which showed a considerable difference. Firstly, the unemployment rate in the countries of the continent grew in the long term, while the employment was at a standstill, or it grew very slowly. Family members of former migrants, refugees and illegal immigrants arrived on a large scale to this state of the labour market – these groups formed a bigger part of the immigrant group. Low qualification, insufficient language knowledge in most cases did not meet the needs of the labour market. Open and vast American system of social benefits with minimal restrictions was accessible to everyone. A very frequent phenomenon was that in traditional families the women did not work, they raised children, whose number exceeded in many cases the average number of children in families of the home population.

In 1990 in Germany, France and the Benelux states and in Scandinavia the unemployment rate of immigrants coming from
countries outside the EU grew higher and higher, in many cases it was twice or three times higher than the average unemployment rate in the country (in the countries of the continent the unemployment rate was mostly two times higher than in America), while their unemployment rate fell 10-30% behind the average. On the revenue side of the migration fiscal balance taxes paid by low-income groups are to be found, while on the expenditure side the amount of money paid to the unemployed, children, social benefits and social service for their mothers (paid maternity and parent leave, children social benefits, benefits on housing, education and health care). Apart from that, costs on the expenditure side are increased by expenses on prisoners, whose major part is formed by immigrants. It is true that the majority of immigrants from outside the EU countries cannot stand up for their position when compared to migration within the EU countries. Immigrants from the EU member states are mostly similar to the home population, taking into consideration indexes of unemployment, employment, education and birth rate, the differences are not significant. Therefore migration within the EU will have a slightly positive growth. Certainly, highly qualified labour force operating in the EU member states and its migration realized by incorporating via special programs on work and life abroad – support programs similar to those in America – has a character of positive growth. The problem is that the ongoing migration during the past decades represents only a tiny part of immigrants nowadays. Furthermore, some of the above mentioned claims typical for African or Asian immigrants does not imply on the others from other countries. Therefore their balance could be positive (e.g. the Chinese).

After 1973 within the framework of migration in Western Europe, Great Britain and later Ireland (it became a popular destination for immigrants at the end of millennium) showed significant exceptions. Immigrants to Great Britain around the half of the nineties migrated because of work migration, and employment data about ethnical groups do not differ from the home populations, while their qualification level is often higher than that of the home population. Apart from that, Britain was the only big member state, which after joining the EU in 2004 after widening the EU, opened its labour market to the new member states, but did not open its social system to immigrants from the new member states. This fact still positively influenced the fiscal balance. The arrival of new employees helped to limit inflation, while indexes of revenue
and employment of the local inhabitants did not show significant decrease. The reason for this is that most of the immigrants belongs to the category of young people (to 35 years), which represents qualified labour force without maintenance obligation, while their employment and unemployment do not differ significantly from the British average and their access to social benefit system is largely limited (after months of proper employment only 12 of them were entitled to make use of most of the social programs). It can be generally said that British immigration fiscal balance is positive, but not with every ethnical group. For example, the above mentioned does not imply at all on the Muslim population coming from the Indian subcontinent, i.e. the Pakistani and the Bangladesh. Budget balance of the Pakistani and the Bangladesh heading to Great Britain is strongly negative (on the other hand fiscal balance under the influence of other immigrant’s positive).

Multiculturalism or integration

In the mentioned western countries immigration brought serious social problems, because - in the consequence of the main ideology of multiculturalism – it took place massively and in most of the cases in the form of integration/without assimilation policy and a part of immigrants came from different social and cultural background. These mentioned facts contributed to social, ethnical, security and political tension in many host countries:

● In the consequence of quickly growing segregation and a group of people distancing themselves from the rest of society, often not speaking the language of the host country, facing huge social problems (high unemployment, growing criminality);
   ● Escalation of tension in ethnical relations between the „home“ local population and immigrants from different ethnical groups, or extreme tension between the immigrant communities, clashes, agitation, violence;
   ● Strengthening of Islamic influence and terrorist organizations in western countries.

The main problem of multiculturalism is not the fact that it considers different groups as one, not even the fact that it considers the values of different cultures the same, not even the fact that it wants to give them the same rights, but the problem is that the complete fragmentation of society leads to uprooting of loyalty and interests of
the groups lead to competition. And that is mostly because they cannot cope with intolerance of the groups which have the same rights. The form of a single legal state and the principle of the same rights of inhabitants applied in the past decades are also disputable, because the west tolerates many illegal traditions (mutilation of women genitals, honor killing and polygamous marriages), tolerance paralyzed the ability of organs to act in the fight against Islamic extremism. But in many countries the tolerance weakens.

In the majority of western countries massive migration took place in the past fifteen years without the support of home population, on the contrary, often against their will. Democratic legitimacy was missing. But anti-migration feelings grew among European and American inhabitants. In respect of the fact that western political elite and traditional political parties could not instantly react to the feelings of the population, their orientation led to a series of civic initiative focused against immigrants. These processes in the countries raised the question of immigration among the most important topics of political parties, in many cases led to a fundamental reform of the immigration policy, or at least to establishing of the planned reforms.

During the reform analysis we can state that immigrant policies and systems show a high level of convergence. In most developed countries they move to the level of the Anglo-Saxon countries, where there exists a so-called „point system“, mainly in the field of work migration, which prefers highly qualified workers. They also try to stop illegal immigration and decrease the number of arrivals through family integration. These measures are important also from the economic point of view; a group of immigrants helping the fiscal balance has a priority. In the past years a greater importance is placed on integration and on the necessity to take language courses in the case of citizenship – integration via compulsory language courses. The basic condition defined by state organs is knowledge of the language, principles and values of the host country, along with fulfilling the duties (assigned by a contract), whose breaking can lead to deprival of the stay permit, expatriation and deportation. This way the use of extreme forms of multiculturalism has been significantly lowered.
Conclusions

The aim of this study was to find out whether it is possible in the United States and the EU member states to compensate population aging and to increase the number of inhabitants in productive age by increasing the number of immigrants. Migration can significantly weaken the economic burden of aging, if the fiscal balance is positive and if it is connected with further steps of economic policy, primarily on the labour market and with a reform of the retirement system.

Immigration is at a standstill, does not create new working places on the labour market, does not increase the employment by itself and does not improve the proportion between the dependent and independent individuals. In countries with a fast growing population this cannot be changed without a reform of the retirement system, as immigrants would have to represent at least one third or a half of the total number of inhabitants, which is unacceptable.

Immigration can be a contribution only in that case when it is linked to reforms of the labour market and reforms of revenue/expenses of the retirement system, whose goal is to stop deterioration of the situation of public expenditure, re-evaluation of state expenses on retirement pensions. While in the United States and the EU member states the need for a reform of the retirement system is obvious (the main question remains when and to what extent), because countries with high unemployment rate, with employment at a standstill, are dependent on that (in years 1990 and 2006 mainly three continental countries – Germany, France and Italy, together with Belgium and Greece). Immigration together with reforms weakens the burden of public expenses of the state and in long-term horizon positively influences the growing burden coming from the principle of solidarity with aging population but only if the fiscal balance is positive.

That means that the amount of taxes and transfer payments paid by immigrants exceeds the amount of money paid to them by the state in the form of benefits, social service and goods. Fiscal balance of the performance of immigrants on the labour market, their income and social care depends on the consumption:

1. The most important thing is whether the demand for work force on a given labour market meets the supply of labour force of immigrants. The key question is what kind of labour force with what
kind of qualification comes to what kind of labour market. If the supply suits the demand in quantity and quality, most of the immigrants find jobs; they become tax payers, which help to improve the fiscal balance to some extent. If not, those immigrants or home population become largely unemployed and become dependant on social benefits, so public expenses connected with that grow and that leads to worsening of the fiscal balance.

2. The system of state social benefits and services has a crucial meaning also in western countries, together with the accessibility of immigrants to obtaining them. In the case of a wide social system of a country, poor immigrants represent a burden for tax payers if the accessibility to state social benefits is not limited.

3. The situation on the labour market and social consumption can be significantly influenced by the structure of immigrants. In connection with the future of labour force, mostly when speaking about special positions, it is certain that they will find work, while refugees, who come as a part of family integration and illegal refugees who do not reflect the needs of the labour market, do not solve financial issues and are therefore less likely to find work.

4. Productivity of immigrants on the labour market, their income and social consumption largely depend on their qualification and language knowledge. Highly qualified people look for work more easily, have higher income, so their consumption of social benefits is lower and they can pay higher tax. Low level of qualification, host country language ignorance create a better chance for immigrants to become unemployed, if they find work, then only with lower income and so their participation on social benefits and on burdening public expenses is greater.

5. The country of origin and cultural and social norms can considerably influence the fiscal balance. If many immigrants, who are typical for big families, move to a country while women are mostly housewives looking after the family, then in countries with a low birth rate a reform of social benefits is necessary.

6. Above the average crime rate among immigrants increases public expenses on public security, on keeping justice, on police, while lower crime rate can lead to savings. Taking into consideration the criteria of fiscal balance we can define the ongoing migration in the United States and in the EU member states as follows:
From the historical point of view, the migration wave in America (1880-1924), as well as the immigration programs in the western European countries (1955-1974) was accompanied by a stable fiscal balance.

At the end of millennium the migration balance comes close to zero, when considering national economy this is irrelevant. Legal immigration is positive, illegal immigration slightly negative.

Fiscal balance of the ongoing migration in many important European countries in years 1973 and 2006 was slightly negative, but when we consider expenses on immigrants coming form the countries of the third world, it is deeply negative, but when we consider only immigrants from the EU member states it is positive.

From this group Great Britain represents a big exception, as it has the highest number of immigrants from all EU member states but also with the highest number of the highly qualified ones.

On the basis of the above mentioned determiners and considering the most beneficial fiscal balance with the aim to maximize economic benefits for the host country the following political components can be suggested:

- It puts work migration into foreground, and within that supports migration of more qualified labour force, but does not forget about immigrants with lower qualification, in case there is demand for them on the labour market (otherwise they enter the country illegally and will also work that way). Strongly rejects illegal immigration, lowers the number of refugees, within family immigration supports immigration of the closest family only (husband, wife, children.)

- It limits – at least partially or temporarily – the accessibility of immigrants to the social system.

- In case of application for a refugee status it decides urgently, looks after realization of the decisions, during the process partly opens the labour market for the applicant and requires a partial fee to cover necessary expenses on living. It cannot frustrate the applicant by banning him from work and by covering all his expenses on living or by high social benefits.
We can claim that the ongoing economic reforms in western countries (e.g. the French retirement reform, the German reform of the labour market) and creation of immigrant policies, economic benefits of migration to decrease problems caused by aging are positive. Slow speed is typical for them, accompanied by resistance of inhabitants and fear of the consequences of political decisions. The direction is correct, but sometimes the speed is not. Furthermore, problems with applying the law can occur, along with breaking the immigration laws and a series of repeated amnesties are good practical examples of that. Faster speed and prompt decisiveness are expected from the politicians.

Bibliography

Toward a value-focused Marketing

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Abstract
The purpose of this article is to analyse the theory that refers to the creation of value by explaining the means of its creation, the concepts of customer’s value in order to finally focus on the concept of co-creation of value.

Keywords: value, co-creation of value

Introduction
The concept of customer’s value has recently turned into one of the most favoured work methods of managers and market analysts worldwide. The creation and delivery of value towards customers is considered as being the cornerstone of the whole marketing process as well as a necessary and efficient way of obtaining a competitive advantage on the market through the promotion of profit, increase and long term success (Tournois, 2004). It is considered that this approach will play a crucial part in the future marketing strategies.

Materials and Methods
The present study was carried out in order to determine the models used for identifying value in a supplier-customer relationship, by analysing its antecedents and consequences. The aim of this study was not to measure the created value, but to highlight the concept of value within a relationship.
Literature Review

The organizations develop an orientation focused on the customer’s value, which eventually leads to a greater competitive advantage on the market (Woodruff, 1997; Kotler, 2003). The marketing specialists agree unanimously that organizational success is obtained through fulfilling and exceeding the customers’ present and potential needs with the help of a strategy that is faster and better than the one employed by the competitors (Kotler, 2003).

Value can be defined as being the whole package of benefits that satisfy the customer’s needs and wishes. The perception that the customer has on this package is extremely important; this perception is always a subjective one, depending on the receiver (Makkar and others, 2008). To put it simply, it always refers to something perceived by the customer, than to something that is determined objectively by the seller (Woodruff, 1997). The customer usually perceives value as a compromise which determines him/her to give up something in order to receive something else in exchange. Day (1994) defines the values perceived by the customer as being the outcome of the comparison between the perceived benefits and costs.

The concepts of customer value are quite similar but according to Woodruff’s (1997) point of view the more we analyse, the more we will notice the existence of certain differences which depend on the definition of other key concepts such as utility, value, benefits and quality. The definition of the concept of customer value also depends on the circumstances that determine the customers to consider the notion of value. This might occur during the acquisition process or when the quality of the product is experienced, namely during or after its usage. Each of these situations determines the client to appeal to different actions. The customer actually perceives value under the form of the desired qualities, of performances and of the consequences that derive from the usage of the respective product in a specific situation (Woodruff, 1997). According to Woodruff (1997), this can also be described by means of a hierarchical model of customer value within which the qualities of the product or service, the consequences resulted from its usage and the final aims reached through them are all independent and influence the final value and the customer’s satisfaction.

The model (see figure number 1) suggests that the customer considers the desired value as a means through which he/she can reach
Toward a value – focused marketing

his/her goals. At the bottom of the hierarchy the client places the product/services seen as a bundle of real characteristics, which is defined by a compromise between the benefits and the costs of the respective product/service (Maas and Graaf, 2008). Then, after buying and using the product, the customer develops a desire for certain characteristics due to their ability to facilitate the achievement of the desired consequences. A customer will learn to desire certain consequences depending on their ability to promote the desired purposes and goals. Analysed from top to bottom the hierarchy shows us that a certain customer uses the goals and the purposes in order to give a certain importance to consequences and through them to certain characteristics that belong to the product in question (Woodruff, 1997).

**Figure 1:** Customer value seen as a hierarchic model

**The value desired by the customer**

- The customers’ purposes and goals
- The desired consequences deriving from the usage of a certain product or service
- The desired characteristics of the product and their performances

**The customer’s satisfaction due to the received value**

- Satisfaction based on the achievement of goals
- Satisfaction based on consequences
- Satisfaction based on characteristics

**Source:** Woodruff, 1997
The value desired by the client has a great importance for the organizations that want to focus on a superior customer value, since it offers and answers to the customers’ needs and consists of the benefits which the customers seek in order to fulfil their needs (Flint and others, 1997).

It is of utmost importance to understand the concept of “customer perceived value”. This represents the difference between all benefits that a buyer expects to obtain from a product or service and the total costs attached to it (for example CPV = the customer’s total value-the customer’s total costs). The customer’s total value represents the perceived monetary value of all economic, functional and psychological benefits which the customer expects to obtain from a certain market offer. The customer’s total costs represent the whole costs which a customer expects to make following the evaluation, obtaining and usage of the market offer.

According to Slater (1997), there is conclusive evidence that businesses that have a long-term success pay more attention to the value they offer to their customers than to obtaining an immediate and direct profit.

Due to the changes in vision that have occurred in the marketing domain in the past two decades, its role has changed. Thus, a transition has been made from a point of view based on customers and markets management towards one based on the collaboration with customers and third parties in order to deliver value (Woodruff, 1997).

The organizations that want to create a superior value for their customers have to undertake a process of value creation that includes communication and then delivery of value towards customers (Kotler, 2003). Thus, according to the theory issued by Kotler (2003), this can be achieved by focusing on five skills: understating the customer’s value, creation of customer’s value, delivery of value towards the customer, keeping and improving the respective value. In order to obtain these skills an organization must use the concepts of chain of values and value delivery network (Kotler, 2003).

Tournois (2004) defines “the creation of customer’s value as being “the ability of a company to offer its customers a relative perceived value (a combination between the relative perceived value and the perceived price-market) higher than the one offered by the competitors”. Therefore, the creation of customer value should not be considered an independent element within a company but it should be
integrated in all actions and processes similar to a global system. Even more, the investments and the risks that must obtain the competitive advantages on a long term are so great and consume so much time that the whole company has to be involved in the process of creating value (Tournois, 2004).

Since value is appreciated from the customer’s point of view, it has to be co-created. This means that both the client and the service provider have to be involved in the process of value creation (Vargo and Lusch, 2004). If the customer is not offered an active part, then there are high chances for him or her to feel unsatisfied. Thus, it is absolutely necessary to take into consideration the aspect referring to the co-creation of value and co-delivery of value, especially when the services sector is involved, due to its special characteristics determined by the production of services (Makkar and others, 2008). Co-creation of value challenges the traditional point of view according to which value is comprised in the product, claiming that value is created by the customer’s experience when he/she consumes the acquired product (Prahalad and Ramaswamy, 2004). The organizations that manage to carry out a co-creation of value, engage into their actions various individuals such as customers, managers, partners and all the company’s shareholders so as to create a common value within the frame set by a so called co-creative enterprise (Ramaswamy, 2010).

Due to the development of the new communication channels via internet and the increase in power of social networks and mass-media, it has become easier for companies to involve their customers in the development of new products and services. The customers’ involvement in the co-creation of a product or service represents more than just the sending and filling-up of questionnaires. The co-creation is a process that allows both customers and non-customers to express freely their opinions, make them public and feel more involved in the whole creation process (Bradford, 2009). At an international level, the marketing conceptions are gradually moving away from the focus on tangible resources, on which the market transactions have been made up till recently, heading towards a more dynamic exchange relationship within which the resources produce the effects and the value is co-created with the customer’s help (Vargo and Lusch, 2004).

The customers expect to be involved in the process of value creation through the usage of new technologies that allow participation. Thus, organizations must learn how to implement these practices within
their structure. The change should always start from the inside by changing the very nature of the relationships extant between the managing staff and employees and by extending the present relationships with the ones that co-create value: customers, shareholders, partners and other employees. This situation requires the managing staff to adopt a brand new conception in order to turn their organization into a co-created one (Ramaswamy, 2009). The organization should first of all involve its employees into a work experience carried out at the level of the organization within which the employees are invested with decisional power. Thus, when time comes they will manage to collaborate successfully with the customers in order to create value. It is assumed that every employee has professional aspiration and seeks to have higher achievements which can be fulfilled with the help of the experience gained from the interaction with his/her co-workers and through the co-creation of value with the customers’ help (Ramaswamy, 2009).

However, within conventional companies that produce consumer goods and within which value has always been considered as being the function of the finite product of the value chain, the involvement of employees in the creation of value and the customers’ experience represents a real challenge. According to the value paradigm, this represents not only the finite product but also the experiences obtained from the product functions, from the interactions made with the help of commitment platforms and through communities of users (Prahald and Ramaswamy, 2004). The challenge for the managing staff is to recognize those interaction processes within the organization that are value generators and to change its focus from the internal processes of the company on the interactions that take place between the individuals working for the company. The change towards such a conception based on interaction in order to co-create a common value represents a key challenge for the managing staff (Ramaswamy, 2009).

Prahalad (Leavy and Moitra, 2006) believes that the co-creation of value changes the nature of innovation. Even though, the traditional methods used for obtaining a competitive advantage are still used - price reductions, high quality products and speed of production - the companies have to learn how to rely on clients and perceive them as a source of innovation. Thus, a change is made from the innovation based on product on the one based on experience as it is the case of the
proliferation of platforms that allow customers to participate in the production of their own experience.

**Result and discussions**

When an organization decides to engage in a dialogue with its customers, it is important for the managing staff to remember to treat them as equal partners. The organizations have to understand the purpose, the meaning and the quality of these conversations from the customer’s point of view. Likewise, it is important to have a viable method of delivering the message further so as to let customers know that the dialogue is valued (Prahalad and Ramaswamy, 2000). Vargo and Lusch (2004) also discuss about the change occurred within the market as more and more customers are requiring the companies they trust, services that are beyond their sphere of competence. Thus, promotion becomes a communicational process characterised by dialogue, questions and answers. The purpose is not the communication towards the market but the development of a continuous process of communication or of dialogues with micro-markets (Vargo and Lusch, 2004).

The capitalization of the customers’ competences represents more than just a dialogue carried out with them. The companies should understand that nowadays customers are no longer interested in the product but on the experiences they can have as a result of its usage. They are no longer attracted by the artificial experiences proposed by the company but they want to create their own experience either by themselves or with the help of professionals or other customers (Prahalad and Ramaswamy, 2000).

Prahalad (Leavy and Moitra, 2006) states that it is important to understand that the concept of co-creation is no longer about the client only, but also about two partners that solve a problem in order to create a unique value. The traditional separation between producer and consumer can no longer be put into practice and the role of the organization is to offer its customers an experimental platform where to co-create value and to facilitate this through experience networks. The evolution of the co-creation logic has natural implications in various aspects of the company such as human resources management and company management styles. Since the employees are much more involved in the co-creation of value with the customer’s help by means of the customer interface, their position within the organization changes
and for this reason are needed new meanings and new types of motivation. Likewise, new questions arise about the management of a corporation because the presumption that the company ≠ the customer changes into the customer ≠ the company or customer-company. This situation raises three fundamental problems that have impact upon the management: 1) the boundaries of the company are less distinct as it is in the network case; 2) all will have influence but not all will be owners as well; 3) the consumers and the communities will have a greater influence over the whole strategy of the respective company (Leavy and Moitra, 2006).

**Conclusion**

Although the importance of creating value for the customer is generally accepted, it can be observed the absence of a unifying frame of the way in which this can be implemented and measured within a company in order to truly improve the performances of a company. Therefore, we consider that this subject deserves further research and study in order to elaborate conceptual models strongly based from a theoretical point of view and to develop reliable and valid scales so as to offer various organizations a useful tool.

**Bibliography**


Budget Deficits Effects on Economic Growth

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Abstract
The budget deficit can not be analyzed autarchically, as it affects all the macroeconomic processes and, is itself influenced by all other macroeconomic indicators. Most analyses and studies on public finance and budget balance measure the impact that budgetary deficits accumulation has on economy. Therefore, the present paper aims at following and analyzing the mutual impact between budget deficit and another economic macro indicator, namely the economic growth.

Keywords: budget deficit, economic growth, fiscal policies

Introduction
Regarding budget deficits, literature in the field says that "...it causes inflation. Budget deficits increase interest rates. Budget deficits cause trade deficits ... and finally ... Budget deficits are a mortgage on the future " \(^1\), the impact on future generations \(^2\).

Taking the final statement as a starting point, we want to test whether the public financial events in Romania’s latest 10 years confirm

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the theoretical predictions, particularly referring to budget deficit-economic growth relationship.

**Material and Methods**

Empirical studies conducted in recent years either theoretically underline the causal link made visible by the economic theory, with subsequent identification of the specific conditions in which it is manifested; or they obtain contrary result to theoretical predictions. Obviously the economic theory has been primarily concerned with regulatory aspects of fiscal policies, which often is not matched by the positive side of fiscal policy; its implementation in contemporary economies is not achieved by following the principles promoted by the macroeconomic theory.

Economic and financial implications of budget deficit can be identified by performing simple econometric tests of linear regression type. These tests can confirm or deny the existence of a correlation between a dependent variable and one or more independent variables on one hand and, on the other hand, if the connection is tested, they can offer an estimation of its “strength”.

In our case, we considered adequate to take the dependent variable macroeconomic growth as a rate of real GDP. As an independent variable, the amount of consolidated general budget account was used.

On account of theoretical predictions and the results of empirical investigated studies, we will econometrically test the following relationship:

$$ RPIB_t = \alpha + \beta SBGC_t + \varepsilon_t $$

where:

- RPIB - real GDP growth rate;
- HBS – consolidated general budget account;
- $\varepsilon$ - stochastic variable;
- $\alpha, \beta$ - scaling coefficients;
- $t$ - time.
The time series used for the two variables in the model consist of semestrial data for 2000, sem. I-2011, taken from the National Institute of Statistics and from the reports of the Ministry of Finance.

**Literature review**

Regarding *the state of* knowledge, it is revealed by a rich literature. Thus, the results obtained by Kneller, Bleaney and Gemmell (1999)³ indicate the fact that budget deficits may have various effects on economic growth, depending on the way they were generated. Consequently while respecting budgetary constraints that governments are facing:

- If the budget deficit is due to a reduction in distortionary taxation, the effect on economic growth is positive;
- If the budget deficit is due to a reduction in non-distortionary taxation, economic growth will not be affected;
- If the budget deficit is due to an increase in productive public spending, the effect on economic growth is positive;
- If the budget deficit is due to an increase in non-productive public spending, the economic growth will not be affected or it will be affected negatively if the amplitude deficit is significant.

Adama and Bevan (2005)⁴ have examined the relationship between budget deficits and economic growth for a group of 45 developing countries and have identified the existence of an inverse causal relationship between the two variables on one hand and, a level of deficit below which causality is blurred. Reduction of budget deficits to about 1.5% of gross domestic product is likely to positively influence the growth rate of GDP. A reduction in budget deficits below this limit, not only no longer produces positive effects on economic growth, but can also actually be detrimental if the reduction is due to a significant fiscal contraction.

Using both econometric regression and the so-called economic growth accountancy, Fisher (1993)⁵ proves the opposite of theoretical

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predictions, on a consistent sample of countries. The results obtained show a reverse causal relationship between budget deficit and economic growth: the budget deficit leads to a reduction of both capital accumulation and productivity growth, with an obviously negative impact on the GDP growth rate.

In the case of the 39 countries with low per capita income, Gupta, Clements, Baldacci and Mulas-Granados (2005) have shown that maintaining a reasonable budget deficit is associated to economic growth, both on short and long term. Naturally, the composition of expenditures exceeding revenues is relevant to the overall impact of the budget deficits on economic growth. In countries where public expenditure is directed towards salaries, a lower growth rate of GDP has been recorded, while in the case of countries where public expenditure is oriented mainly towards investments and purchases of goods and services, the situation is reversed.

**Results and Discussion**

The idea according to which governments accept budget deficits in order to achieve public investments meant to generate long-term growth was promoted for the first time by the famous English theorist John Maynard Keynes, which stated this thesis as a recommendation to the governments of developed countries at that time, in order to overcome major global economic crisis and subsequent economic recovery.

In the modern theory of public finance, Musgrave and Musgrave (1989) have synthesized the three roles that any state should accomplish in the economy: allocative, distributive and stabilizing role. As a corollary to the role of stabilizing the economy that governmental authorities are supposed to have, the idea of a budget deficit may be drawn (due to the increase of productive public spending or to the reduction of distortionary taxation) accepted in order to place the economy on a stable long term growth line.

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The report progress of economic growth and budget deficit in nominal prices in Romania during 2000-2010, can be seen on the following chart:

**Figure nr. 1.** Evolution BGC deficit versus GDP evolution

The evolution of the two macroeconomic indicators in Romania during year 2000 does not definitely highlight the interdependence between them, which means that other factors have influenced them in an important way. But what stands out on the chart is that the obvious manifestation of excessive budget deficits since 2008 is accompanied by a significant decline in the gross domestic product. Moreover, empirical studies\(^9\) revealed that a budget deficit above 3% of GDP is a brake on its growth. Similarly, a lower deficit of 1.5% has zero effect on economic growth so, it is neutral to this.

Furthermore, the scientific value of these data will be tested by using econometric estimation performed by the E-Views software package, shown in the following table:

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\(^9\) Cochrane, J.H., Understanding policy in the great recession: Some unpleasant fiscal arithmetic, European Economic Review, Volume 55, Issue 1, January 2011
Table 1. Estimation results between the real GDP growth rate and the general consolidated government balance relationship

Dependent Variable: RPIB
Method: Least Squares
Sample: 1 22
Included observations: 22

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBGC</td>
<td>0.971122</td>
<td>0.461554</td>
<td>2.104025</td>
<td>0.0482</td>
</tr>
<tr>
<td>C</td>
<td>3.114116</td>
<td>1.028590</td>
<td>3.027559</td>
<td>0.0066</td>
</tr>
</tbody>
</table>

R-squared 0.181231  Mean dependent var 1.754545
Adjusted R-squared 0.140293  S.D. dependent var 4.048366
S.E. of regression 3.753661  Akaike info criterion 5.569848
Sum squared resid 281.7994  Schwarz criterion 5.669034
Log likelihood -59.26833  F-statistic 4.426919
Durbin-Watson stat 1.602901  Prob(F-statistic) 0.048228

The results indicate that on a level of statistical significance of 5% general government balance is positively correlated with the GDP growth rate in the long run. Standard error, lower than the estimated coefficient for the independent variable, the corresponding value of t-statistic test, the low probability that the value for this coefficient is incorrectly estimated (only 4.82%) indicates that the coefficient is correctly estimated.

This way, taking also into account the estimated coefficient for the independent variable (general consolidated government balance), a 1% reduction in the budget deficit will increase GDP growth rate by 0.97%.

It is also worth mentioning that the value of \( R^2 \) determination coefficient is low (only 0.18), which indicates that GDP growth rate has other significant determinants. The equation proposed describes the time evolution of the real GDP growth rate only in proportion of 18.12%.
Conclusion

The theme of the present research has found motivation in the particular attention that Lisbon process assigns to the public finance reform in order to stimulate economic growth. The main purpose of the analysis model is to bring light into the relationship between public finances and economic growth in Romania, as an EU member. This requires determining whether public finance provides policy tools that contribute to a higher growth trend, or to identify if there is a short-term impact on economic performance at its best. Following the approach of studies in this area which exploit the properties of time series data, some persistent deterministic changes have been revealed in per capita rates of GDP growth and public finances. However, when we look at stochastic trends, it appears that both variables regarding public finances and growth rates of production have been stable. This model does not exclude a long-term effect of fiscal variables themselves, where expenditure and income have opposite effects on the long term. Using panel co-integration techniques recently developed, there is a overwhelming evidence of co-integration between both "sides of the budget," as it would be expected on theoretical grounds.

We estimate the long term effect of fiscal policies on economic growth using a widely used approach. The main findings are that the expenditure side of the budget seems to constantly affect long-term growth of the business cycle. Specifically, the size of government and governmental consumption are found to have a clearly negative effect on economic growth, while public investment,\(^{10}\) a positive influence. On the revenue side, there is evidence for a negative effect resulted from direct taxation on economic growth. Moreover, a strong negative impact generated by direct taxation on capital accumulation is confirmed by the survey data to which we referred. This impact appears to work primarily by taxing labor income, which could lead to wage pressures, thereby reducing profits and investments of European labor markets.

The causality relationship that can be established between economic growth and the budget deficit is that positive economic growth generates additional public resources. It is the authorities choice to adopt whether a cyclical, or a counter-cyclical fiscal policy. While a negative economic growth generates both contraction and consequently

\(^{10}\) Johansson, P., Debt Relief, Investment and Growth, World Development, Volume 38, Issue 9, September 2010, pg. 1204-1216
adjustment of the public sector, we conclude that an expansionary fiscal policy, with a large budget deficits accumulation, is incorrect in terms of macroeconomic policy rules in periods of positive economic growth.

On the other hand, which at first seems incredible is that tax evasion\(^{11}\) in a dynamic environment, but in a country with high corruption can be a powerful driver of economic growth. This aspect is highlighted in a long term analysis. The result derived from the basic principle of the model considered, according to which evasion stimulates investment, accumulation and economic growth. But on the other hand, it reduces tax revenues. More specifically, according to the Laffer curve, this result derives from the behavior of tax revenue in a static framework. As a result, if policymakers want to maximize the growth rate, they must determine the appropriate tax rate. This limit value varies according to the level of monitoring and is specific for the "internal honesty" of the country. In particular, given the "internal honesty" of the country, a lower tax rate leads to tax revenue maximization and generates a lower level of monitoring.

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The impact of Fiscal Stability Pact on Fiscal consolidation in Romania

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Abstract
In 2012 many states are facing a crisis of public debt and high deficits and challenges resumption of economic growth. In Europe, efforts are made to achieve and maintain the deficit targets set by international organizations. In 2011, most EU Member States received recommendations from the ECOFIN to take action and cut the deficit below 3% by the deadlines set for each country, starting in 2011 and ending in 2015.

Keywords: Fiscal Stability Pact, fiscal deficit, fiscal harmonization, the Community acquis

Introduction
The tax reform in Romania has been a lengthy and complex process which involved carrying out multiple targets to reduce imbalances in the national economy.

The tax system was influenced primarily by the transition from a planned economy to a market economy. This action required significant financial and material resources. In the recent years, the challenge that Romania had to bear was to adapt to the membership of the European Union namely compliance with strict rules imposed on the tax system. The entire Romanian society had to go through many transformations in the desire of socio-economic development especially due to the demands of citizens to be European citizens with the same rights and principles applied in the Member States and a decent standard of living.
Material and Methods

This study presents the evolution and involution of the State Budget of Romania as a result of the integration of this country into the European Union.

In the proposed research, the most useful and popular method used is the comparative data analysis which is performed both, in theory and in practice.

When we performed this comparative analysis we used the data source from the account of the state budget for 2006-2010. Based on these documents we performed several tables aimed towards facilitating the analysis and comparison of data and the extraction of conclusions that reflect the influence of integration into the European Union on the state budget and also the process of social-economic development in Romania.

Literature review

In taxation, Romania faced many difficulties regarding the implementation of the acquis, transposition of directives and regulations imposed by the European Union, as it said in this context provided from the work of I. Condor, in which the tax file is undoubtedly one of the most difficult issues in the negotiation of harmonizing Romanian legislation in the European Union1.

Acquis is defined by T. G. Savu as "the communitarian acquis" which means all the legal rules governing the European Union institutions work, actions and policies, which are:

- the content, principles and political objectives contained in the original Treaties of the European Communities and in the future (the Single European Act, the Maastricht Treaty and the Treaty of Amsterdam);
- legislation adopted by the EU institutions for the implementation of treaties (regulations, directives, decisions, opinions and recommendations);
- Court of Justice of the European Communities;
- declarations and resolutions adopted by the European Union;

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1 Condor, I., Tax reform, harmonized with EU requirements, Economic Truth, no. 47 (555), 2002, page 17
The impact of fiscal stability pact on fiscal consolidation in Romania

- joint actions, joint positions, conventions signed, resolutions, statements and other documents adopted within the Common Foreign and Security Policy and Cooperation in Justice and Home Affairs;
- international agreements to which the Community is a party, while the EU still lacks legal personality and those concluded between Member States of the European Union with regard to its work.  

Tax reform in Romania is the result of changes in the Romanian economy, changes that caused an adaptation of the tax system to create mechanisms and tools to ensure the financial resources of the state constitution and framework by which they are managed and used to achieve savings as effective. Objectives of maintaining growth and thus tax reform were to:
- Support the convergence process of the Romanian economy in the European economy;
- Promotion of harmonized taxation of market mechanisms;
- Accelerating the process of fiscal decentralization in the collection and allocation of public resources;
- Thorough reform of tax administration in order to improve the collection of tax liabilities;
- Require all categories of taxpayers and all forms of income;
- Increased capacity to absorb structural funds post-accession;
- Reduction in administration costs of taxes;
- Increase transparency of public expenditure;
- Establishing government deficit at a level correlated with the requirements of international organizations;
- Further harmonization of fiscal and budgetary legislation with EU.

These objectives have been captured in the book of C. Tulai (2005), "Comparative Taxation and tax harmonization."

Results and discussion

"Stability and Growth Pact (SGP) is a regulatory framework for the coordination of national fiscal policies in the Economic and Monetary Union (EMU). The pact was designed to ensure the stability of public finances, an important requirement for the proper functioning

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2 Savu, T.G., Company and the acquis communitaire, Tribune Publishing House, Bucharest, 2001, page 22
of EMU. This pact includes a preventive component and a corrective component\(^3\).

Under the provisions of the preventive arm Member States must submit annual stability programs (convergence) showing how they intend to achieve or ensure stable fiscal position over an medium term, taking into account the immediate impact that aging will have on the budget. These programs are assessed by the Commission and the Council shall advise each. The preventive includes two policy instruments that can be used to avoid "excessive" deficits. Based on a proposal from the Commission, the Council may bring proceedings early warning to prevent an excessive deficit. Through early warning system, the Commission may recommend a Member State to comply with the Stability and Growth Pact requirements.

Corrective arm of the Pact governs the excessive deficit procedure (EDP). This is triggered when the deficit exceeds 3% of GDP threshold of the Treaty. If it is concluded that the deficit is excessive under the Treaty, the Council issued recommendations to the Member States concerned to correct the excessive deficit and set a deadline for this. Failure leads to triggering the next steps in the procedure, including the possibility of sanctioning the euro area in Member States.

The document whose final form was agreed at the informal European Council on 30 January 2012, establishes the structural deficit threshold limit of 0.5%. If public debt is significantly below 60% of GDP and there is no risk of long-term sustainability of public finances, the structural deficit may reach 1% of GDP. Budget deficit plus the maximum cyclic structure will fall within 3% of GDP. Great Britain and the Czech Republic have signed the treaty.

According to the Treaty, if there is a deviation from these levels it will automatically trigger a correction mechanism to be introduced into national law, as so-called" golden rule", to limit the structural deficit. If a Member State does not implement these two provisions, the national law may be brought before the Court of Justice of the European Union. Failure to comply with this court decision may result in a financial penalty of up to 0.1% of the GDP of that country.

"The European fiscal pact requires a commitment from the participating States to a: sound fiscal governance, introducing provisions for balancing the budget in the Constitution, strengthening

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\(^3\) www.ec.europa.eu
rules on excessive deficit procedure through automation sanctions and the European Commission budget submissions for review⁴.

Romania signed the Treaty of fiscal governance on 28 February 2012, in Bucharest.

The chances of implementation of fiscal governances depended on finding ways to increase revenues and expenditures rationalization and to avoid an excessive deficit. In this sense, a retrospective analysis of budget execution and recorded deficit is indispensable.

For Romania, the budget deficit in 2010 was -6.9% of GDP, in 2011 was -4.35% of GDP, according to data issued by the Ministry of Finance. Tax reforms implemented in 2011 in the most EU Member States focused on increasing revenues, while they are accompanied by efforts to strengthen spending.

Table 1. Romania's budget deficit between 2006 and 2011

<table>
<thead>
<tr>
<th>Year</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>(million lei)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXCEDENT(+)</td>
<td>-10537,5</td>
<td>-15388,9</td>
<td>-19735,4</td>
<td>-33416,9</td>
<td>-36081,3</td>
<td>-25167,1</td>
</tr>
<tr>
<td>DEFICIT (-)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP</td>
<td>344650,6</td>
<td>416006,8</td>
<td>514700</td>
<td>501139,4</td>
<td>522561,1</td>
<td>578551,9</td>
</tr>
<tr>
<td>Deficit (%)</td>
<td>-3,06</td>
<td>-3,7</td>
<td>-3,83</td>
<td>-6,67</td>
<td>-6,9</td>
<td>-4,35</td>
</tr>
</tbody>
</table>

Source: National Institute of Statistics

Chart 1. Romania's budget deficit evolution in the period 2006-2011

Source: made by author based on data from Table 1

⁴http://www.adevarul.ro/international/Liderii-UE-semnat-stabilitate-fiscala_0_656334474.html
The chart above is a tendency to increase Romania's budget deficit with EU integration. The sharpest increase occurs in 2009-2010 when it comes to values close to 7%, followed later by a decline around 4% in 2011.

In the data from Table nr. 2, we can see that in 2006, when Romania was not yet an EU member State, the budget received a total revenue of 40,698.1 million lei, minus expenses amounted to 51,235,600,000 lei. As can be seen in Table no. 1, at the end of 2010, Romania registered a deficit of 36,081,300,000 lei.

Table 2. The income statement in Romania between 2006 and 2010

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total income</strong></td>
<td>40698.1</td>
<td>48984.6</td>
<td>61151</td>
<td>56434.8</td>
<td>66546.5</td>
</tr>
<tr>
<td><strong>Total expenditures</strong></td>
<td>51235.6</td>
<td>64373.5</td>
<td>80886.4</td>
<td>89851.7</td>
<td>102627.8</td>
</tr>
</tbody>
</table>

Source: National Institute of Statistics (http://www.insse.ro)

The year 2007 draws a series of events seemingly favorable but don’t show the amazing expected outcome of entrepreneurs and economists in Romania. This opinion is observed in Table 1 as a considerable increase over the previous year budget deficit of EU integration.

**Conclusion**

The general trend in the EU is to reduce the level of direct taxation and moving the tax burden towards indirect taxes. In the years 2010-2011, this trend is less clear, most states maintaining constant tax rates. So, pace of tax rates decreased to pre-crisis when countries were in a stronger competition on providing an attractive investment environment, purely fiscal. However, countries such as the Czech Republic, Hungary, Lithuania, Great Britain, Greece had reduced their tax rates. Czech reduced tax rate in 2010 from 20% to 19%, Greece has decided to reduce the standard rate of corporation tax from 25% to 24% in 2010 and 20% in 2011 and Great Britain decided to reduce the standard rate of corporation tax in 2011 from 28% to 27% and to reduce the tax rate from 21% to 20%. Countries like Lithuania, the Netherlands, Germany took measures as restricting the tax base.

In case of the income tax and the social contributions, Romania remained with a flat income tax (16%) and the introduction of social
security regulations to the Tax Code in 2011 and of the taxation on income residents beginning from the 1st January 2012. In the tax administration there had been done some unification statements, single statement on social contributions and cancellation penalties and delay penalties for unpaid tax in 2011, under certain conditions.

Following the signing of the EU accession treaty, Romania had to respect and implement several provisions that would affect the state budget and the local budgets. At 1st January 2007, following the application of the right to free movement of goods, persons and services and the abolition of customs duties for all members of the European community, in terms of foregone import and export within the EU, were adopted the concepts of intra-Community acquisition or delivery. In other words, since 2007, Romania lost revenues to the State budget revenues assigned duties to the detriment of the EU’s own resources or so-called financial aid U.E.

Therefore, from a financial standpoint, at least initially, the impact of EU integration was negative for the Romanian national budget.

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Aspects regarding the dynamic of the SMEs Sector in the Romanian West development Zone, during the Economic Crisis

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Abstract
Regional development is a complex process that needs to sustain the development of each city from the region taking into account, modeling and developing the human activities and so, it contributes to the reduction of the economic gaps of different regions. Among the areas of interest of regional policies, since the establishment of the development regions in Romania were the development of the SMEs sector.

In the Western part of Romania, the number of SMEs has increased continuously until 2008, the beginning of the economic crisis. If in 2005, in the Western region operated around 42,000 SMEs, at the end of 2008 their number reached over 62,500, which shows a 50% increase.

During the economic crisis, by using statistical data, we will find out in the dynamic of the new SMEs a reduction of their number, in Romania. This study proposes an analysis of the SMEs sector in West Romania, during the 2008-2012 economic crisis, underlining also the importance of the anti-crisis measures initiated in October 2010.

Keywords: SMEs, economic crisis, economic growth, regional development
Introduction

The actually global economic crisis began in July 2007, since the loss of investor confidence in the U.S. mortgage securitization\(^1\) led to a liquidity crisis, which caused a substantial injection of capital into the financial markets by the U.S. Federal Reserve, the Bank of England and the European Central Bank. TEDSpread\(^2\) index increased significantly in July 2007, oscillated a year and then increased again in September 2008, reaching a record of 4.65% at October 10, 2008. The crisis got worst in 2008 as the world's stock markets collapsed and than went into a period of acute instability. A large number of banks, lenders and insurance companies went bankrupt in the weeks that followed.

SMEs have paid the heaviest price in the period 2008-2011. Only in the western part of Romania, because of the economic crisis, thousands of companies have disappeared and their employees have thickened unemployed people.

In Arad County, in the period 2008-2011, 5,000 companies were suspended, between 800 and 1,000 were in liquidation or bankruptcy. Only 1,500 of 12,000 companies have profit.

A good management and a good market orientation may allow the SMEs not to feel the consequences of the financial crisis and can improve them, financially.

The West region has - by the number of inhabitants - 8.94% of the total Romanian population. That means a density of 21 SMEs/1000 inhabitants\(^3\).

The economic and financial crisis, which began in 2008, has changed quite dramatically the economic landscape of Europe's economy.

Research work on the economic crisis and its effects on western development area are few. Therefore, in our paper, based on statistical data, we make a research of the economic-financial crisis phenomenon for this area of development and we come up with some ideas able to avoid in the future disastrous phenomena for an economy, especially for the population.

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\(^1\) Mortgage securitization in general involves creating securities, i.e. securities that mortgage based on mortgage claims. These can be based and other receivables, in which case no longer called mortgage securities

\(^2\) Perceived credit risk in the general economy

\(^3\) Source: own processing based on NTC and INS.
Material and Methods

The materials used in our research are mainly statistical data of different institutions, covering the 2008-2010 periods. The method used is an economic investigation on a representative sample of SMEs in the West Region of Romania.

The Romanian SMEs sector development during the economic crisis

An analysis on the SMEs in 2008-2010 is presented in the White Paper on SMEs in Romania, which appears under CECCAR and CNIPMMR, yearly.

This study investigates, using a representative sample, the condition and prospects of the entrepreneurial phenomenon in Romania and shows the future trends of the SMEs sector.

An exhaustive analysis of the SMEs sector in Romania is carried out in the works of Nicolescu (2010), Roman and Vreja (2011), Rizea (2010) and Ionete (2010). At the same time, in the Economic Tribune review (2011), the above mentioned authors underlined the main causes of the economic crisis in the SMEs sector, in Romania. This are:

- major difficulties in ensuring the necessary funding, liquidity and credit block;
- drastic decline in the demand of products and services at national and international level, reflected in the reduce of the exports and domestic sales;
  - high taxation;
  - large increases in the prices of raw materials, energy and food;
  - fluctuations of the exchange rate and inflation;
  - the financial blockage caused by delayed payments, by costly and difficult law procedures for settling trade disputes;
  - unstable legal framework, bureaucracy and a huge number of administrative barriers in the activity of the SMEs;
  - low absorption of the EU funds;
  - a lack of measures to improve the SMEs activity, during the crisis.

Marchis highlights the development trend of the SMEs in 2009. Studying the impact of economic crisis on SMEs in Romania\(^4\), the analysis reveals that, between March 2008 and March 2010, 44.5%...
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of the companies have reduced their activity, 43% of the economic units operate at the same parameters and 12.7% of the companies have had an upward trend.

The SMEs activity during 2008 and December 2010 shows that the young economic units (under 5 years) works at the same level like before in a percentage of 48.16% and 51.39% of the SMEs operating for 5-10 years have reduced their activity in the analyzed period.

**Table nr. 1** An analysis of SMEs, by age

<table>
<thead>
<tr>
<th>Nr.</th>
<th>Dynamic of the SMEs activity during October 2008-March 2011</th>
<th>The age of SMEs</th>
</tr>
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<tbody>
<tr>
<td></td>
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<td>Under 5 years</td>
</tr>
<tr>
<td>1.</td>
<td>SMEs which reduced the activity</td>
<td>34,13%</td>
</tr>
<tr>
<td>2.</td>
<td>SMEs that works at the same level</td>
<td>48,16%</td>
</tr>
<tr>
<td>3.</td>
<td>SMEs which raised activity</td>
<td>17,71%</td>
</tr>
</tbody>
</table>

Depending on the regional distribution of SMEs, that study reveals that 89% of the SMEs from the West of Romania have a reduced activity, while only about 10% of them have raised their economic activity.

Following the structure of the values and weights of turnover recorded in 2008-2010 in the SMEs sector of the eight development regions from Romania, we can analyze the evolution of the economic performance in terms of the global crisis.

**Aspects regarding the SMEs sector development in Western Romania, during the economic crisis**

For this research, we have made an analysis of the financial records and statistical data relating to a number of over 1300 SMEs in West Romania, from 2008-2010.

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5 Study conducted by the National Council of Private Small and Medium enterprises of Romania (CNIPMMR), 2011
6 Ibidem
The business situation of the SMEs in the West region during 2008 - 2010 can be characterized as worrying, because only 5% of the SMEs are considered prosperous. Regarding the reasons for reducing the activity of SMEs we must mention the bad Romanian economic environment. In the analyzed period the taxes are increasing while the facilities to develop business decreased substantially, with all the opportunities created by the EU funds.

Analyzing the distribution by counties, we can see major discrepancies between different geographical areas\(^7\).

A very small contribution to the job creation (less than one percent) in the West was registered in Caraş-Severin.

Trade Registry Office data from the four counties of Western Region - Arad, Timis, Caras-Severin and Hunedoara showed that in the first quarter, during January-March 2009, there has been a total of 838 companies which was recorded opening the bankruptcy procedure. In Arad County, a total of 226 companies have applied for bankruptcy, in Timiş 157 companies, in Caraş-Severin 88 and in Hunedoara County 367 SMEs. Taking into account the field of these businesses, the most affected companies are in retailing (60) and industrial production (36).

Studying the evolution in the number of SMEs, in 2008, the Western Region had a total of 62,358 SMEs and at the end of 2010 their number was 57,171.

In the West Region, the SMEs structure on the main areas of activity indicates that 34% of the companies operates in services (compared to 33% at national level) and 33% in trade (vs. 37% at national level). Industry, energy and construction, transport and agriculture, have around the same weight as the national level.

In the West Region we record a similar trend in the number of SMEs in areas like construction and trade. It means that for all the companies operating in these sectors; their number has declined from 2008 to 2009. The evolution of these fields in the West Region is similar to the evolution at national level. In agriculture it can be seen a return of the number of enterprises in 2010, compared with 2009. At the same time, the medium and large entities continue to decline in number in 2010, in contrast with the evolution at national level.

The structure of the SMEs in the West Region is identical with the national trend: almost 92% are micro enterprises, 7% are small and

\(^7\) http://jdre.ase.ro/
medium enterprises, 1.4% have practically the same state of affairs like the business environment at the national level.

**Results and Discussion**

The analyses conducted by the National Council for SME in the previous years have shown that SMEs in Romania were hit hard by the economic crisis.

Our study concluded that 70% of the SMEs in the Western Region have adopted measures to deal with the crisis of 2008-2010. Among the measures adopted, we mentioned:

- reducing the cost of services provided by third parties;
- reducing the cost of utilities.

The change Romania has to make in this sector is to take a long-term economic strategy and structural reforms, to bring stability and to increase the absorption of structural funds.

Romania has negotiated with the IMF, World Bank and European Bank for Reconstruction and Development a financial strategy designed to support the economy. Measures aim to reduce the budget deficit to 4.4% in 2011 and below 3% in 2012.

The agreement signed with the IMF has, in previous years, positive results.

For the SMEs sector, out of the crisis requires:

- Political stability;
- Tax reduction;
- Government support;
- European funds.

The SMEs offer a significant number of jobs and a lot of measures which can influence the flexibility and dynamism of local parts, the process of adapting the production to the market requirements.

Given the economic and financial crisis, SME's can assure macroeconomic stability and growth.

**Conclusion**

To sustain the SMEs sector in the current economic crisis is an apt solution to counteract the adverse effects of the economic recovery:

- the activity of SMEs in Romania faces many difficulties caused by the economic situation, the delaying privatization and the economic restructuring;
- the SMEs have to be the most profitable economic sector in Romania, with the largest growth perspective;
- private SMEs can create jobs to absorb redundant staff;
- private SMEs requires a strategy and policies different from those used in the public sector;

So, in order to improve the economic situation of the SMEs, the following measures have to be taken: elimination of flat tax, increasing access to finance the SMEs, simplifying and improving the administrative and legislative measures, reducing bureaucracy, encouraging a competitive business environment, reducing taxation, stimulating the creation of new jobs, exporting and implementing new technology, stimulating production investment.

To obtain economic growth, the government must take further steps to improve the business environment. Such measures may include tax exemption for the SMEs, on reinvested profits, reducing labor taxation.

In order to sustain this sector, the state has to pay debts, to encourage the absorption of European funds, to invest in infrastructure. Moreover, the business environment needs a stable fiscal framework, get from investment and attracting the European funds.

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The Manager - as Personality and Motivator

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Abstract
A manager is somebody who is capable of coping with changes, has a positive attitude towards them and by knowing well the environment is able to constantly adapt, plan and implement changes to achieve the sustainable growth of a company. By communicating with and integrating employees s/he is able to reduce their resistance to changes. In order to create and manage the knowledge of employees, every manager must possess strategic, organisational, operational personal qualities and must be a leader. As such s/he makes use of his/her charisma and intellectual stimulation, cares individually for the development of every single employee in terms of needs, inspires and designs appropriate goals for the co-workers. Among all of the roles a manager has to play, the good leader role, i.e. somebody to be trusted and respected, is the most important one.
The article presents the results of a study involving 150 employees in the economy. It brings the opinions of the respondents about what the manager should be like: a great personality and motivator who wants to create and manage the knowledge of employees. The study has found that the employees favour most those managers, who encourage them to reach the desired goals, which trust their employees and stimulate them to solve problems together. They must be aware of the importance of the well-being of their employees, value their work and knowledge and encourage team work.

Keywords: manager, personality, motivator, employee, company
Introduction

Companies need employees with specific qualities necessary for specific work posts or for a specific task or project. In spite of flexibility and ability to adapt, it is difficult to transfer employees to a different work post. Employees are always needed for a specific work post. There they can develop, gain greater competence, exercise their own will and be dynamic. Their behaviour, however, can also be unpredictable.

High efficiency and satisfaction of employees are the result of a well designed work post. Authors usually present this in chapters describing the analysis of work posts or jobs and defining the qualities of employees. If in our analysis of work we ask ourselves what kind of an employee we need in order for him/her to perform best, we must ask ourselves how to adapt work to the employees in order for it to be most effective and personally satisfying for them. This is how work systems can be developed, which are employee friendly and stimulate creativity.

In all of this an important role is attributed to the personal and motivational abilities of managers. As a leader, a manager must use his/her charisma to create and manage the knowledge of employees (as a model of behaviour s/he transfers values, imubes respect and trust), stimulate them intellectually (via novel ways of seeing the situation), care for them individually (the development of every employee in terms of their needs), inspire them (transferring vision via enthusiasm and optimism), and develop appropriate goals for them.

On the basis of experience from practice, the characteristics of Slovene managers can be classified into four groups (Cimerman et al., 2003, pp. 69-70): (1) strategic characteristics (visionary, goal oriented, strategist and decision maker), (2) organisational characteristics (organiser, HR manager), (3) operational leadership characteristics (communicator, motivator, negotiator, team leader) and (4) personal characteristics (ethical, charismatic, open minded). It is not difficult to find a manager with knowledge, but to find one with extraordinary qualities is much harder.

Manager as personality

The personality of an individual is everything that determines the characteristic behaviour and experience of every one of us. People are similar to one another in their characteristics and behaviour but the personality represents a unique combination of qualities and ways of behaviour. This is where we differ from one another and can define ourselves as unique individuals. The personality of an individual can be understood as an entity made up of numerous features. Musek (2005, p.
36) mentions the following personal characteristics: intelligence, vivacity, diligence, strength and also gender and age, body weight and height, colour of hair, skin, eyes, etc. We can say that the number of personal traits is practically unlimited. In each individual these traits then combine into a characteristic pattern which is unique and unrepeatable, and forms the personality of an individual.

As already mentioned in the introduction, the following are the characteristics that make up the personality of a manager (Cimerman et al., 2003, pp. 70-74):

1. An ethical manager knows and respects ethical principles originating in the company within the wider environment, is aware of what is right and what is wrong in a certain situation, takes decisions and acts responsibly in a social sense, as well as provides co-workers with true information. The manager also acts in the interest of the environment s/he lives and works in (care for natural environment, for the local community within which the company is located, etc.). We must, however, acknowledge the fact that in different environments managers possess different ethical principles.

2. As a charismatic person, a manager radiates strength, is self-confident and convincing, co-workers accept him/her as an authority, recognise his/her special abilities, and due to the manager’s strong personality are willing to follow with loyalty and enthusiasm.

3. A truly successful manager is an open minded person, who believes in the freedom of the individual and is aware of the borders that are not to be crossed, and that s/he has no right to interfere in the life of another person without permission. The open minded manager is a person without prejudices, never judging others without actually having personal experience with them. S/he is able to encourage and use what is different in people for progress and development. A good manager accepts every employee as a unique human being and knows how to bring out the person’s strong points and abilities.

The skill of resoluteness and impact, and the style of decision making or thinking also belong to the personal qualities of a manager.

If a manager is committed and resolute, plans and goals can be easily achieved. In this connection Jackman (2008, p. 46) mentions two important aspects: (1) taking on the initiative – maintaining a positive attitude and setting goals, and (2) identifying the participants involved and exercising influence over them. A manager’s determination is the way s/he behaves towards others while it is at the same time also a way of thinking and reflecting on one’s attitudes, convictions, values and self-respect. Determined and resolute action also means genuine respect
of oneself and others. A manager’s resolute action contributes to a positive and active approach, to the acceptance of compromises and negotiations resulting in the satisfaction of both, the manager and employees.

Kavčič (1998, p. 217) lists four fundamental decision making styles: (1) directive style, characterised by a low degree of tolerance for ambiguity and the manager’s orientation toward goals and technical issues. The manager is interested in facts, rules and procedures, is capable of solving difficult tasks and is best in red tape companies or companies where power and strength are important, (2) analytic style, characterised by a high degree of tolerance for ambiguity, manager’s orientation toward work, rules and procedures, wants to have detailed analyses and a great amount of data, analyses issues logically, enjoys complex situations and is good in the fields of science and engineering, (3) conceptual style, characterised by a high degree of tolerance for ambiguity and orientation toward people and social issues. The manager is creative; goals are achieved by researching and finding new ways and strategies, as well as by risk taking. Information is gathered on the basis of intuition and in discussions with people; is best in decentralised companies and (4) behavioural style, characterised by a low degree of tolerance for ambiguity and manager’s expressed orientation toward people and social issues. Likes being with people, is willing to listen to them, shows interest in others, and is supportive, sociable, friendly; most successful in companies, where cooperation between people and interactions with co-workers are important. The manager usually pursues a certain basic goal, which might be more expressed, while other styles are less expressed. The analytic style can thus be applied for executing work tasks, for the »study« of rules and procedures, the conceptual style for the creation of new ideas, the directive one for the execution of actions, and the behavioural one for the relationship with others.

Manager as motivator

Highly motivated employees are crucial for every company trying to achieve good results. For the employees the advantage of motivation is satisfaction at work (Heller and Hindle, 2001, p. 45). It is closely connected with emotions. When satisfying our needs and motives, when achieving our motivational goals, positive emotions develop – satisfaction, joy, pride… We know internal and external motivation: we are internally motivated when we do something out of
joy, and we are externally motivated because of external stimuli like reward, money, or praise (Musek and Pečjak, 2001).

Motivation is the will to act. It was believed motivation could be influenced from outside, but now we know that everybody is motivated by several different forces (Heller and Hindle, 2001, p. 290). A manager must be able to influence the employees in such a way that they will harmonise their motivation with the needs of the company. Companies want to release and make use of the full potential of their employees; therefore they avoid issuing commands or controlling their workers and tend to counsel or encourage them. Kralj (2003, p. 445) believes that managers use motivation as a means of exercising influence over their employees, who should strive to work for the goals of the company and in this way also for their own goals. This is how they are motivated. In order to be successful, the manager must know well the qualities of the employees.

Success in business, the only measure of capable management, depends on motivation and stimulation of all employees, on their abilities, qualifications and good performance of co-workers, as well as on motivation, participation and ethical behaviour (Florjančič and Paape, 2002, p. 101). In companies, managing structures can count on above-average results and on satisfied employees if they have introduced motivational factors in the working environment (Svetlik et al., 2009, p. 344). This is how good interpersonal relations can develop, how the possibilities for applying knowledge, or for acquiring new knowledge and skills are created, and how the competencies of employees can be enhanced. A satisfied worker is much more inclined to accept the motivators used to encourage him/her to work.

Manager as motivator takes into account the fact that different employees are motivated by different things at different times. By setting the goals, the manager mobilizes the energy of the co-workers. By using the system of rewards and sanctions s/he reacts with justice and consistency to their behaviour. Manager as motivator is aware of the needs of the employees and helps them to achieve satisfaction. By appealing to their logic and emotions s/he encourages them to become dedicated to their work, to achieve goals, and to participate.

Cimerman et al. (2003) believe that every manager must be aware of the fact that people draw their motivation from inside. If, however, the basic desire to be active is not present, managers cannot do much. They must be aware of the fact that, unfortunately, with their action they can even destroy the internal motivation of their workers. One of their primary responsibilities is removing obstacles which could
thwart the workers from performing well. Knowing the goals is important for motivation. The motivation of a subordinate will namely diminish if the manager does not clearly explain his/her personal goals and how these fit into the goals of the company. Only in this way can the employees truly recognise the relevance of their work and their own importance for the company. The feelings of power, self-respect and sense of belonging help the employees to become motivated. The responsibility of the manager is to help co-workers to understand the importance of their work and to provide them with appropriate feedback about their performance. In an atmosphere of mutual respect, where there are openness, comprehensive information, high ethical standards, trust, security and tolerance, managerial emphasis on personal differences, well-being, mutual understanding and placing people first, the motivation of employees for work can greatly increase.

Method

Sample: The research included 60 male students (40%) and 90 female students (60%) of the School of Business and Management Novo mesto, attending first, second and third year part time studies of Management and Business, and Information Science in Management and Business, who are employed in the economic sector.

Goals: Goals of the research were to find out how important were for the respondents the qualities of managers vis à vis their employees, and which were the most important motivational factors stimulating their creativity, commitment for work, achievement of goals and willingness to participate.

Hypotheses: Hypothesis 1: Those employed in the economic sector consider trust and care for the well-being of employees as the most important personal qualities of managers. Hypothesis 2: Those employed in the economic sector believe the security of employment to be the most important motivational factor.

Statistical methods: Data were aggregated with a questionnaire. They were then processed with the SPSS application for PCs. With the help of subprograms one dimensional tables were created for absolute (f) and relative frequencies (f%) and average assessments.

Research results and interpretation

In our study we were interested in the personal qualities of managers, which were assessed on a scale from 1 to 5, where 1 meant »never«, 2 »rarely«, 3 »from time to time«, 4 »frequently« and 5 »always«.
We can see from the above Table that managers trust their employees (3.40), encourage them to solve problems (3.33), care for their well-being (3.30), inspire trust in the value of their work (3.27), inform them about the goals of the company (3.23), encourage them for team work (3.23), know and exploit their abilities (3.17), consult with them about the decisions (2.83), and also inform them about their decisions (2.83). Results are not the best since managers could trust their employees more. They might, however, have a good reason for their lack of trust – the employees might not be sufficiently internally motivated for their work or managers might even act in ways which »destroy« their motivation, which in turn results in a poor and irresponsible attitude of the employees toward work, and contributes to poor work outcomes. This then leads to mistrust and dissatisfaction on both sides. The present state of economy definitely impacts the relationships in a company, there is no security of employment, the employees are becoming dispirited, are not loyal anymore, while, on the other hand, company owners exert pressure on the managers, expecting them to achieve the set goals, reach top results and exhibit economic behaviour as regards leading, organising and developing the employees.

It is a worrying fact that managers do not communicate sufficiently with their employees. The statements »Consults with me about decisions.« and »Informs me about his/her decisions.« were namely assessed the lowest. We can presume that managers are not sufficiently aware of the importance of decision making and of socially responsible behaviour since they are not providing their co-workers with sufficient information. Neither are they sufficiently aware of the fact that
employees would like to be informed about what is happening in the company and that they would want to participate in decision making where possible. Employees want to discuss about and search for appropriate solutions. In this way they would feel co-responsible for achieving the goals. The low average assessment of the statement »Encourages us for team work.« (3.23) is also surprising because nowadays we cannot imagine anymore how results could be reached without the creative cooperation and team work of the whole work force. It is, however, also true that if the manager is not a team person, s/he cannot encourage the employees to work in such a manner; besides, not all tasks can be done in a team way. A manager must ensure that the employees become aware that with their individually performed task they are contributing toward a common goal and joint results.

On the basis of our results Hypothesis 1 which claims that those employed in the economic sector consider manager’s trust and care for the well-being of employees to be the most important personal qualities of managers can be partially accepted. The qualities of »S/he trusts me« and »Encourages us to jointly solve problems« were assessed the highest. »Care for the well-being of employees« was assessed as the third best quality.

In the second part of the research we wanted to find out the motivational factors with which the managers encourage their employees for work. The manager as motivator must namely be aware of the needs of the employees. The respondents had to choose from thirteen motivational factors which they identified as very important, important or unimportant. We classified their answers into three groups: in the first group were the factors from 51% to 100%, in the second group were those from 31% to 50%, and in the third group were the factors of 30%. The motivational factors were analysed also in terms of age (up to 26 years, 27-45 years, 46 years or more) and in terms of the level of the respondents’ education (secondary, tertiary).
The most important motivational factors are: good relations with co-workers (97%) and good relations with superiors (70%). In the third place is security of employment (60%), followed by the importance of praise and recognition for good work (53%). In the fifth place is »knowing goals in their totality« (50%). Sixth place is shared by high pay and possibility of education (40%). Then come: appropriate work time, promotion, right kind of work, feeling of the importance of one's work, possibility of realising one's ideas, closeness to home.

Among the important factors they listed: possibility of realising one's ideas (83%). The feeling of the importance of one's work, the right kind of work and closeness to home got 70%. They are followed by appropriate work time, high pay, promotion and possibility of education with 57%. Rewards and recognition for good work, and knowing the goals of the company received 47%. Then follow the security of employment, relations with superiors and co-workers.
The unimportant motivators are: 17% for the closeness of home, 10% for promotion, 3% for the feeling of the importance of one’s work, possibility of education and knowing the goals of the company.

With regard to the above results, Hypothesis 2, which says that those employed in the economic sector consider as the most important motivational factor the security of employment, cannot be confirmed. The most important motivational factors were namely good relations with co-workers. The security of employment came third.

The employees younger than 26 years placed among the most important motivational factors the relations with co-workers. This is followed by the relations with superiors, praise and recognition for good work, then the possibility of promotion, appropriate work time, security of employment, possibility of education, knowing the goals of the company and high pay. For them the important factors are the possibility of realizing one’s ideas, high pay, »feeling that my work is important«, closeness to home, knowing the goals of the company, right kind of work, possibility of education, promotion, appropriate work time, security of employment, relations with superiors, praise and recognition for good work.

The employees aged 26 to 45 years considered as the most important motivational factors the following: relations with co-workers, relations with superiors, security of employment and knowing the goals. Among the important factors were: possibility of realizing one’s ideas, closeness to home, appropriate work time, promotion, feeling that my work is important, right kind of work, praise and recognition for good work, high pay, possibility of education, knowing the goals of the company, security of employment, relationship with superiors and relations with co-workers. The unimportant motivational factor was closeness to home.

The employees older than 45 years listed as the most important motivational factors the relations with co-workers, which was followed by praise and recognition, knowing the goals of the company, security of employment, relations with superiors, appropriate work time, feeling that my work is important, possibility of realizing one’s ideas, right kind of work and the possibility of education. The important factors were: high pay and promotion. The unimportant factor was closeness to home.

Those with secondary education listed as the most important factors the following: relations with co-workers, relations with superiors, security of employment and knowing the goals of the company. Among the important factors were: realizing one’s ideas, right kind of work, closeness to home, feeling that my work is important,
appropriate work time, high pay, praise and recognition, education, knowing the goals of the company, relations with superiors and security of employment. The unimportant factors were promotion and closeness to home.

The employees with higher, i.e. tertiary education placed as the most important factors the relations with co-workers and superiors, security of employment, high pay, praise and recognition, right kind of work and appropriate work time, education, knowing the goals of the company, realising one’s ideas. The important factors were promotion, importance of my work and closeness to home. They did not list any unimportant factors.

Conclusion

Every time and every company require of their managers specific qualities and abilities. Thus, at the time of economic crisis and changes the ability to cope with changes and turning them to one’s advantage is the quality sought for. Greater adaptability and the ability of planning and implementing changes to benefit the company are relevant. For such an approach the decision making style is important, within which the manager wants and does make decisions quickly – even on the basis of incomplete information – and is prepared to let go of plans if they cannot be realised. What is desired is the skill of greater adaptability to stress situations under circumstances where changes and fast decision making have become a way of life.

By implementing certain methods and activities for human resource management, the manager tries to impact positively the interpersonal relations in the company and also contribute to the achievement of the set goals. An important role in this respect is attributed to his/her psychological, physical and behavioural characteristics – which is why we claim that the manager’s personality is a psycho-physical entity. Personal qualities are relatively permanent characteristics on the basis of which managers differ from one another. There are many personal qualities, and they can be classified under four headings: temperament, character, abilities and personal characteristics. If we want to employ an energetic and conscientious manager, we must carefully study his/her temperament and character. The temperament includes the person’s characteristic manners, behavioural styles and emotions. The qualities of the character are connected with the person’s will and motivation, acquired with education and also with self-education. The traits of one’s character can become one’s values. Every manager possesses own values and motives, own areas of interest,
convictions and opinions. In comparison with the characteristics of the temperament, the character traits depend more on the influence of the environment.

In the role of the motivator, the manager directs the behaviour of the employees in the desired direction with encouragement and corrections, and by using material and non-material forms of remuneration. The employees with internal motivation, who enjoy their work, are already motivated. Extremely high internal motivation can be found in people who were high achievers in different areas. It is also important that industriousness is considered to be one of the values of employees. Through work they are namely able to satisfy their need to work and create, to feel important and worthy of respect, etc. The purpose of long-term motivation is – self-motivation. The manager should therefore learn all about motivation in order for it to become a constituent part of his/her personality and the way of action.

Bibliography
Methods and theories on transfer prices

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Abstract
In the current global economic situation, when multinationals companies are no longer a rarity and the increase of volume and frequency of intra-group transactions are a reality, the transfer prices issue has become a problem for big companies because it significantly affects the fiscal task of the groups. The transfer price is basically the price used for transfer of tangible and intangible assets between related parties and it should be determined on the basis of market value without being influenced by the relationship of affiliation. However, if for services or tangible assets, the comparison of the transfer price to the market one is relatively easy to achieve, for the intangible ones, quantifying future benefits waived by the affiliated person compared to the situation in which it would be independent is harder to be established.

Keywords: multinational, transfer price, market price, transaction, intra-group transactions

Introduction
In the current context of globalization, the most important actors in the global economy have become the multinationals companies; trade between affiliated persons came to represent about 60% of world trade. Therefore addressing transfer is very important.

In the area of transfer price development in recent years it can be seen that the tax authorities in the region of Central and Eastern Europe have become significantly more concerned with this area. Currently
investigation is carried out by applying an aggressive pricing policy of transfer within multinational enterprises and aiming to ensure that every time profits are properly allocated to each affiliate to avoid reducing taxes payment by minimizing tax base (profits).

In Central and South-East Europe, the first country to adopt legislation on transfer price was Poland (1997), then Hungary, Czech, Lithuania, Slovenia, Latvia, Russia and finally also Romania.

Recent developments in transfer prices in Romania:
- 1994 - first introduces the principle that related party transactions to be carried out at market value;
- 2004 – the Fiscal Code establishes in a systematic manner the definition of affiliated persons, states the principle of market value and methods of transfer pricing;
- July 2005 - was also introduced the concept of Advance Price Agreement;
- September 2006 - were introduced through amendments to the Fiscal Procedure Code, requirements on formal documentation for transfer prices, that must be presented at the request of fiscal authorities;
- June 2007 - were issued Regulations on emission and the related documentation required to a taxpayer requesting an Advance Price Agreement.
- February 2008 - were published detailed national regulations on the content of the transfer price file.

Transfer prices
The term "transfer prices" is used for transactions between related parties, transactions which are not only subjects to free market rules and, therefore, can be influenced by subjective factors such as company’s group policy in minimizing the fiscal cost of the group.

Transfer price is the price at which a person (natural or legal) transfers assets - tangible and intangible (e.g., know-how, trademarks) - and services to an affiliate. Transactions between related parties must be made on the basis of market value - "the arm's length principle", as found in the literature - without being influenced by the relationship of "kinship" between them. Often, however, market conditions cannot be played entirely because it is possible that transactions of the kind made by affiliates wouldn’t be completed if the companies were independent and that because of the traded object itself. An example would be the sale of intangible assets - such as patents, trademarks, in this case, the
probability that an independent person to renounce in favor of other independent persons at some future benefits that cannot be accurately quantified at the time of the transaction is reduced.

According to the Tax Code, the tax authorities may reconsider transfer pricing and, consequently, to adjust income or expense related to any of the persons involved in a transaction if the price at which the transaction was effected is not a market price, respectively the price at which the transaction would’ve been completed under the same or similar conditions by independent persons.

The result of these adjustments may result in additional income tax expense to the taxpayer declared obligation - where, by applying the principle of the free market, tax authorities conclude that the taxpayer recognized income is less than the one that should have been acknowledged or if the recognized expenses are greater than those which were recognized - respectively a tax obligation less than originally stated, given that the situation would present contrary (recognized income greater than the one that should have been acknowledged or recognized charges lower than those that should have been recognized).

According to the Methodological Norms for the application of the Tax Code, transactions between the Romanian legal entities are not subject to adjustment by the tax authorities, only those signed by Romanian legal entities with affiliated non-resident persons as well as with Romanian individual persons.

Revenue and expenditure adjustments made by tax authorities by applying transfer prices provisions are made solely for tax purposes, without affecting the financial situations of affiliated persons.

**Setting the transfer prices**

In the context of current world trade, when the trend of economic globalization manifests clearly involving expanding multinationals companies into ever more countries and the emergence of transnational corporations, the share of international trade transactions undertaken by them - especially intra - group transaction - had a significant increase in recent years. The problem of transfer prices is complex for both tax authorities and for multinational companies, highlighting it as the most important fiscal challenge that they face today. This is because failure to comply with the market value principle will affect the fiscal task of the group.
Setting transfer prices is done, in general terms, by comparison with the prices in which independent persons would agree to comparable transactions in comparable circumstances.

For comparison, taxpayers will have to assess whether there are significant differences from comparable transactions or persons and, if any, accordingly adjust transfer prices based on a functional analysis. Doing the functional analysis aims to identify and comparing activities and responsibilities undertaken or which may be undertaken by independent entities and affiliated entities. In order to achieve functional analysis, an important element is the structure and organization of the group. Also, functional analysis will be conducted by reference to the following:

- economic importance of the functions performed by each person affiliated in the transactions;
- sharing of risks and responsibilities between related parties involved in the transaction, as an increased risk assumed will be remunerated as such;
- volume, type and nature of assets employed or to be employed by affiliated entities involved in the transaction, such as equipment, intangible fix assets to be used, etc.

Although the Tax Code and the Methodological Regulations of application leaves to the taxpayer the usage of the closest method presented in the box, Order no. 222/2008 of the President of NAFA, concerning the contents of the transfer prices file, states that the application of any other method than the traditional ones as well as applying any other method than the comparison of prices must be justified by the taxpayer.

Provisions regarding the obligation of taxpayers to determine transfer prices based on the methods presented exists since 1999, but the reference to the application of the regulations of the Guidelines for transfer prices issued by the OECD to the choosing of the method for determination of transfer prices was introduced in 2003 with the appearance of the Tax Code. Regarding the requirement to prepare the transfer prices file, it exists since 2006 with the publication of GO no. 35/2006 for the amendment of the Fiscal Procedure Code. However, the provisions on the specific content of the transfer prices file appeared only in February 2008, with the publication of Order no. 222/2008 of the President of NAFA.
To prevent the negative effects of non-compliance to transfer prices provisions, taxpayers can "protect" themselves both by obtaining advance price agreements, as well as preparing the transfer prices file that justifies applying the principle of market price in setting the transactions prices with legal non-resident persons.

**Advance price agreement**

Advance price agreement is an administrative document issued by the National Agency for Fiscal Administration to address a request from the taxpayer, concerning the establishment of the terms and conditions in which are going to be determined, over a fixed period, the transfer prices for transactions between related parties, as defined in the Tax Code.

Advance pricing agreements can be unilateral – in which case are issued by the tax authorities of one state, bilateral or multilateral - where the agreement is issued jointly by two or more tax authorities in various tax jurisdictions.

The advantage of obtaining an advance price agreement is that it is enforceable and binding to the tax authorities as long as the terms and conditions of that agreement are met by the taxpayer. Advance price agreement may be issued for a period of up to five years or even longer if the transactions are conducted under long-term contracts. Taxpayers may request the amendment of the Agreement, for the purposes of its validity extension, expansion or revision. Getting an advance pricing agreement aims to prevent any adjustments of the tax authorities by obtaining the agreement of the competent tax authority that the method of determining the transaction price of the transaction/transactions that the taxpayer is going to carry out with related parties are at the market price level. The procedure for issuing an advance price agreement was approved by GD 529/2007. From a procedural perspective, to obtain an advance price agreement, the taxpayers will have to submit a request for it accompanied by related documentation of the transaction/transactions for which the issuing of the agreement is requested. Documentation of the taxpayer applying for the issue of an advance price agreement must contain certain information, as provided in the procedures approved by G.D no. 529/2007, including information on transfer prices policy of the group to which the taxpayer belongs, describing the functions and risks undertaken, comparative analysis, describing the methodology of the proposed transfer prices.
Issuing an advance price agreement is conditioned also by the payment of a fee equivalent in RON of 20,000 EUR for large taxpayers, and for other taxpayer’s categories if the consolidated value of transactions for which the issuance is requested exceeds the equivalent of 4 million Euros, respectively a tax equivalent in RON of 10,000 EUR by other taxpayers.

Changing advance pricing agreement at the request of the taxpayer is also subject to payment of a fee equivalent in RON of 15,000 EUR for large taxpayers and other taxpayers if consolidated value of transactions subject to the agreement exceeds 4 million EUR, respectively a tax equivalent in RON of 6,000 EUR for other taxpayers.

The taxpayer holding an advance price agreement is required to submit, within the time line for submission of annual financial statements, to the tax authority that issued the agreement, an annual report on how to the terms and conditions of the agreement were met. Failure to do so will lead to the annulment of the advance price agreement obtained.

Taxpayers who have obtained an advance price agreement issued by the competent tax authorities of Romania are no longer required to prepare a transfer prices file.

**Code of conduct**

The provisions of the Code of Conduct of the European Union (OECD) in terms of transfer prices are in a constant development and therefore are often the center of attention in specialist publications. Instead, provisions (OECD) are not as well known - which does not mean that they are not as important. Therefore, we further propose a review of these provisions and their impact on the Member States of the European Union.

*What is the Code of Conduct?*

Drawn up as a result of the efforts of the European Union Joint Forum on Transfer Prices and adopted by the European Union in June 2006, the Code of Conduct aims to standardize the documentation that multinationals need to provide to the tax authorities to justify the price of cross-border transactions made within the group.

By the Code of Conduct was intended to significantly reduce administrative problems of the companies performing intra-group transactions in the European Union.
Transfer prices file

Regulations concerning the specific content of the transfer prices file to be prepared by the taxpayer, as required by the Fiscal Procedure Code, are represented by Order no. 222/2008 of the President of NAFA and published in Official Gazette no. 129 of 19 February 2008.

It is worth noting that the requirements of national legislation on the transfer prices file contents comply with the Code of Conduct on transfer prices documentation for associated enterprises in the European Union (published in the Official Journal of the European Union no. C176/1 from 28 July 2006) which also complements the provisions of the Order no. 222/2008. Also the Order no. 222/2008 is completed by the transfer prices Guidelines issued by the Organization for Economic Cooperation and Development.

The deadline for the submission of the transfer prices file to the tax authority is determined by it and cannot exceed 3 months. The taxpayer may request a one-time extension of the deadline for submission of the file, for a period not exceeding initial deadline set by the tax. The fiscal body may decide to suspend the tax audit up to the presentation of the transfer prices file.

Refusal to submit transfer prices file by the taxpayer and incomplete disclosure results in the tax authorities estimating the level of the transfer prices and therefore the payment by the taxpayer of the fine imposed for failure to submit the file - only if the taxpayer refuses to submit the file, and also with higher income tax debts with interests for being late - if the forecast made by the tax results in additional income tax liability to the one declared and paid by the taxpayer. Estimation of transfer prices by the tax authorities will be made by identifying three comparable transactions and estimate transfer prices as value of the arithmetic mean of similar price identified by tax authorities. Regarding comparative analysis in selecting comparable transactions, the taxpayers will have to take into account the territorial criteria in the order in which they are prescribed by regulations, namely: national, EU and international. All information submitted in the transfer prices file should be available in Romanian. If there are documents available in another language, they will be accompanied by certified translation into Romanian.

Information available electronically will be presented in an accessible format agreed with the competent tax authority.
Transfer prices file must be drawn up by taxpayers engaged in transactions with related companies and presented to the tax authorities at their request, which will be submitted in writing during the general or partial tax audit.

Methods for determining transfer prices
The following methods are recognized by the transfer prices Guidelines issued by the OECD:

- price comparison method;
- cost-plus method;
- resale price method;
- profit sharing method;
- net margin method.

Content of the transfer prices file

Information about the group

- Organizational structure of the group, legal and operational;
- General description of the group activity, business strategy, including changes in business strategy from the previous fiscal year;
- Description and implementing transfer prices methodology application within the group if any;
- General description of the transactions between affiliated persons resident in the EU: how the trading is done, billing, value of transactions;
- General description of the functions and risks assumed by affiliates, including changes in this respect over the previous year;
- Presentation of the holders of intangible assets from the group (patents, trademarks, know-how etc.) and royalties paid or received;
- Presentation of advance price agreements signed by the taxpayer or by another company in the group, in connection with it, except those issued by NAFA.

Taxpayer information

- Detailed presentation of transactions with related parties:
  - how the trading is done;
  - billing;
  - value transactions.
- Presentation of comparative analysis;
  - characteristics of goods or services;
  - functional analysis (functions, risks and assets used);
Methods and theories on transfer prices

- contract terms;
- economic circumstances;
- specific business strategies;
- information on external or internal comparable transactions;

Presentation of affiliated persons and their permanent establishments involved in these transactions or arrangements;
- Description of the method of calculation of transfer prices and the argumentation of the selection criteria for it;
- Description of other conditions considered relevant for the taxpayer.

Conclusion

Dramatic increase in global trade and cross-border direct investment has made the transfer price now to strive in becoming an important determinant of taxation of the members of multinational companies group. It is known that determining the stated price principle before starting negotiations is often difficult for both multinationals and relevant administrations. Starting from the premise that legislative measures are the central pillar in the fight against cross-border tax evasion in the area of transfer prices, it is understood by itself that it is necessary to eliminate redundancies existing in the legal framework, both nationally and internationally, and, from the desire of an uniform treatment of the matter, it is necessary the legislative “matching” of the referential domestic tax laws of the Member with the regulations contained in the OECD transfer prices Guidelines and also with the principles structured in the Code of Conduct of transfer prices.

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*** Government Decision no. 529/2007 regarding the procedure for issuing individual in advance tax solution and of the advance price agreement
*** Law no. 571/2003 regarding the Fiscal Code, as amended and supplemented
*** Government Ordinance no. 92/2003 on the Fiscal Procedure Code, republished with subsequent amendments

*** N.A.F.A. President Order no. 222/2008 regarding the contents of the transfer prices file
The Repercussions of the Accountancy System at the Level of the SMEs Activity

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Abstract
In the economical activity of the SMEs, the interference of accountancy is reflected by respecting some principles and compulsory rules according to the current laws. Ever since the antiquity the accountancy was manifested at the level of SMEs through the activity of some professionals recognized for their competency to produce, explore and authenticate economical data which were quantified, presented according to the regulated conventions. The professional accountant, abiding by the professional rules, goes through a cyclic and determined route to obtain, filter, measure and expose the precise information of the business. Thus can be observed the significant importance in the business environment of the object of study of accountancy - the economical patrimony based on which it is reflected the patrimonial situation of the company.

Keywords: accountancy, patrimony, SMEs, business environment, accountancy rules

Temporal foray in the accountancy universe
For many people, the term accountancy generates the science and art of mastering the businesses. In fact, it has a more complex applicability, and many different definitions for accountancy have been formulated along the centuries.

The first definition belongs to the Italian Luca Pacioli (The Father of Accounting) in his famous book “Summa de arithmetica, geometria, proportioni et proportionalita” (The Collected Knowledge of
Arithmetic, Geometry, Proportion and Proportionality), where he defines the term “accountancy” as an assembly of principles and rules for registering in double party (the change between the wealth and capital) of a merchant’s fortune, as well as all his businesses.

In Romania, Emanoil I. Nichifor laid the foundations of accountancy in 1837 in his book “The Commercial Laws”, a translation from German language, which played an important role in substantiation and popularization of accountancy concepts on Romanian territory. A very important contribution had also I. Elvian by elaborating the first law project for regulating accountancy.

Citing professor Rusu D. “accountancy” means registering the wealth based on some juridical - economical rapports which give birth to monetary return statements, thus accruing the simultaneity of accountancy treated as scientific theory and also as working technique.

According to the Accountancy Law number 82/1991, republished and updated in 2011, the accountancy has as an object of study to measure, to evaluate, to know, to administrate and to control the assets, debts, and own capitals, as well as the results obtained from the activity of an individual or a juridical entity.¹

Of those mentioned above we can notice the significant importance of the accountancy’s object of study in the business world - the economical patrimony - represented through the point of view of the rights and pecuniary obligations of a physical or juridical person with economical value, as well as the economic goods of an individual or a juridical entity with economic value, as well as the economic goods that they refer to. Based on this conception, the patrimony can be presented this way:

Figure nr. 1: The representation of the patrimony


¹ Accounting Law number 82/1991, with further modifications and updated.
The wealth elements, meaning the goods or the economical means, form the patrimonial active, and the rights and the duties form the balancing passive.

As a result, accountancy appeared out of the necessity to answer on the informational and decisional level to the problem of administration of economic values, separated patrimonial, reflected precisely in the balance of entities.

**Conceptual approaches regarding the SMEs**

The acronym “SMEs” entered the current vocabulary to refer to small and medium companies, a category opposed to big companies.

Though the significances of the concept appear, at first sight, easy to frame, in the literature on the subject, the approaches are varied. This fact is due to the contingency and diversity of the phenomenon.

For a long period of time the SME were seen as reduced models of the big companies, having an ephemeral existence. But along the years it was demonstrated the permanence of these entities, although many of them disappeared, were been created and others have been developed all the time.

The main distinction between the big companies and the SMEs is the increased degree of external uncertainty of the business environment in which the company operates, but also the internal conflicts which generate actions or motivations. That is why we cannot say that there is a unanimously recognized definition of the notion of “SME”, but we can prove that these are economic entities, independent on the juridical and financial level, with diverse activities.

The companies have always represented the sphere of action where accountancy takes complex forms of surveying and control of the resources, spending and results.

In order to be neutral, but also compatible as a communication system, accountancy is based on rules and general principles of evaluating and economical calculating on a precise terminology which is identical for all users of information.

At present there is not in Romania an accountancy frame on its own, but all the problems regarding the organization and accountancy leadership, as well as the requests towards the accountancy information are regulated by the Accountancy Law number 82/ 1991, republished, and by the regulations adopted by OMFP 3055/2009.
According to the national accountancy legislation in force number 364/2004 (updated), there is a delimitation referring to small and medium entities. This approach is based on the size criteria of an economical entity - the medium number of employees, the turnover and the total assets, fulfilling cumulatively the following conditions:

a. have a medium annual number smaller than 250.

b. achieve an annual netto turnover of up to 50 million euro, equivalent in lei, or own total assets that do not surpass the equivalent in lei of 43 million euro, according to the latest financial situation that was approved. By total assets we understand fixed assets plus circulatory assets plus expenses in advance.

c. fulfill the criterion of independency.

The small and medium companies are classified according to the annual medium number of employees and by the annual netto turnover or the total assets they own into the following categories:

<table>
<thead>
<tr>
<th>Enterprise category</th>
<th>Average number of employees</th>
<th>Turnover (CA) (equivalent in RON)</th>
<th>Total Assets (equivalent in RON)</th>
</tr>
</thead>
<tbody>
<tr>
<td>medium</td>
<td>&lt; 250</td>
<td>≤ 50 mil Euro</td>
<td>≤ 43 mil Euro</td>
</tr>
<tr>
<td>small</td>
<td>&lt; 50</td>
<td>≤ 10 mil Euro</td>
<td>≤ 10 mil Euro</td>
</tr>
<tr>
<td>micro</td>
<td>&lt; 10</td>
<td>≤ 2 mil Euro</td>
<td>≤ 2 mil Euro</td>
</tr>
</tbody>
</table>

*Source: The Law number 346/2004 art.4, republished*

The small and medium companies are considered independent if they are not owned in a percentage of over 25% of their capital or their voting rights by another company or more companies, which do not belong to the SMEs group.

Belonging to a category or another has a direct effect on the way of preparing the financial situation:

- entities which on the date of the balance surpass the limits of 2 out of the following three criteria: total asset: 3.65.000 euro, CA 7.300.000 euro, the current number of employees 50, CA 7.300.000 euro, number of current employees 50, they write annual financial report which comprise: balance, profit account and loss. The situation of
modifying their own capital, the the report of cash flux, the explanation notes for the annual financial reports.
- entities which on the date off the balance do not surpass the limits of two of the size criteria will write simplified annual financial reports which comprise: Balance, Profit account and Loss, simplified explanatory notes.

As a result of those shown above, accountancy is in debt to the company, and as a consequence, through its vocation, it represents an instrument of knowledge and administration of the patrimony situation, of the financial situation and of the result obtained.

**SMEs in the context of the Romanian business environment**

We live a time of changes, of restructuring, the overthrow of all yesterday’s fulcrum, a world in which the managers do not know the steps they need to take face the community policy and to become competitive on the market. There is also the tendency to start a business by entrepreneurs without getting detailed information (market study, business plan, feasibility study), or without a professional preparation in the field attesting the qualities, capabilities, meaning the features needed to ensure the success in business.

In other words, an entrepreneur who launches a business neglecting accountancy and the accountant is *like he drove a fast car ignoring the road*[^3]. This is the comparison which must be done regarding the importance of the financial reports for an accountant.

According to the enquiry done by a group of specialist in our country (CNIPMMR, CECCAR, AIPPIMM and IMMIM) the economic environment in Romania, during the first part of the year 2011, was appreciated as preventing the development of SMEs in proportion of 69.61% of companies, 22.66% of SMEs appreciated as neuter the evolution of the business environment and only a percentage of 7.73% was favorable to development (graph no.1).

[^3]: Marin Toma during the conference in Bucharest, 2011
Graph no. 1: The perceived situation of SMEs related to the development

First semester of 2011

Source: own interpretation after the results of the White Paper of SMEs in Romania

The number of SMEs which appreciated the economic environment as being unfriendly was bigger at the level of companies 5-10 years old (72.14%), companies from Central Region (81.12%), micro-companies (70.59%) or building companies (71.74%).

But we cannot help noticing the fact that only 13.16% of these companies estimated that the evolution of the Romanian business environment in the year 2011 would be favorable⁴.

Analyzing the 11 representative indicators to sum up the parameter of SMEs evolution, we get the following results (table no. 2):

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⁴ The Report “The White Paper of SMEs in Romania” 2011
## Table no.2: SMEs index

<table>
<thead>
<tr>
<th>No</th>
<th>Indicator</th>
<th>Actual score</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Registrations of commercial companies</td>
<td>10</td>
<td>Number of registrations increased by 18.69% in the first semester of 2011 compared to the first semester of 2010</td>
</tr>
<tr>
<td>2</td>
<td>Number of defunct commercial companies</td>
<td>10</td>
<td>Number of defunct commercial companies decreased by 70.97% in the first semester of 2011 compared to the first semester of 2010</td>
</tr>
<tr>
<td>3</td>
<td>Number of profitable SMEs</td>
<td>1</td>
<td>Number of profitable SMEs increased by 1% in the first semester of 2011 compared to the first semester of 2010</td>
</tr>
<tr>
<td>4</td>
<td>Number of SMEs with losses</td>
<td>2</td>
<td>Number of SMEs with losses decreased by 2% in the first semester of 2011 compared to the first semester of 2010</td>
</tr>
<tr>
<td>5</td>
<td>SMEs debts</td>
<td>-1</td>
<td>SMEs debts increased by 3.2% in the first semester of 2011 compared to the first semester of 2010</td>
</tr>
<tr>
<td>6</td>
<td>Average turnover per SME</td>
<td>1</td>
<td>Average turnover per SME increased by 0.24% in the first semester of 2011 compared to the first semester of 2010</td>
</tr>
<tr>
<td>7</td>
<td>Average profit per SME</td>
<td>-1</td>
<td>Average profit per SME decreased by 1.83% in the first semester of 2011 compared to the first semester of 2010</td>
</tr>
<tr>
<td>8</td>
<td>Average loss per SME</td>
<td>2</td>
<td>Average loss per SME decreased by 0.18% in the first semester of 2011 compared to the first semester of 2010</td>
</tr>
<tr>
<td>9</td>
<td>Average number of employees per SME</td>
<td>2</td>
<td>Average number of employees per SME increased by 0.85% in the first semester of 2011 compared to the first semester of 2010</td>
</tr>
<tr>
<td>10</td>
<td>SMEs’ investments</td>
<td>-1</td>
<td>SMEs’ investments decreased by 2% in the first semester of 2011 compared to the first semester of 2010</td>
</tr>
<tr>
<td>11</td>
<td>Exports of private entreprises</td>
<td>2</td>
<td>Exports of private enterprises increased by 1.09% in the first semester of 2011 compared to the first semester of 2010</td>
</tr>
<tr>
<td>12</td>
<td>TOTAL</td>
<td>27</td>
<td></td>
</tr>
</tbody>
</table>

*Source: processing after CNIPMMR*
By summing up the scores of all 11 indicators, the SMEs index reached 27 points; this value reflects a satisfying evolution of the Romanian SMEs sector. In the first semester of 2010, this index reached -22 points.

<table>
<thead>
<tr>
<th>SMEs index</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 64 – 0 points</td>
<td>Very unsatisfying</td>
</tr>
<tr>
<td>0 – 20 points</td>
<td>Unsatisfying</td>
</tr>
<tr>
<td>20 – 45 points</td>
<td>Satisfying</td>
</tr>
<tr>
<td>45 – 70 points</td>
<td>Good</td>
</tr>
<tr>
<td>More than 70 points</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

Taking into account also the evolution of the SMEs during the period October 2008- March 2011 when there were recorded the following values: 39.22% of companies reduced their activity, 24.02% went bankrupt, 27.25% stagnated and only a percentage of 9.51% succeeded to develop their activity, we can notice the improvement of the economic environment in Romania. This thing reflects also the increase of entrepreneurs’ trust in the positive economical evolution for the next years.

Before concluding we must mention the fact that part of the cause of the unfavourable evolution of SMEs was generated by the problems that the entities have met due to the economic downfall.

**Interfering of accountancy in the economic activity of SMEs**

By the Order number 2239/2011 were approved the simplified accountancy rules in harmony with the European directives, applied to SMEs, also approached by OMFP 3055/2009. These accountancy rules are apply by juridical entities provisioned by the Accountancy Law 82/1991, republished, modified and updated on the 2\textsuperscript{nd} of June 2011 with the regulations OUG number 37/2011.

The indicators present in the regulations are: the turnover, total of assests and number of employees.

The three indicators mentioned above are watched according to the annual financial situation written at the end of the previous year in this way:
The repercussions of the accountancy system at the level the SMEs.

- the turnover based on the data written in the form “Profit account and loss”, finished on the 31st of December of the previous year;
- total assets based on the data written in the form “Balance” finished on the 31st of December of the previous year.
- the turnover and the total assets are established on the exchange rate lei/euro at the end of the previous financial use.
- the medium number of employees, based on the data written in the „Explanatory Notice, information regarding the employees, administrators and managers”, finished on the 31st of December of the previous year.

The general purpose of these regulations underlines the harmonization of the national accountancy with the European directives.

The above mentioned regulations establish the following:

a. The principles and the accountancy rules based on the organization and managing of the company.

The accountancy of a SME must obey some accountancy rules and principles.

- The principles that are the base for the accountancy records of SMEs are:
  - The principle of continuity of activity
  - The principle of the permanence of methods
  - The principle of prudence
  - The principle of the independence of the exercise
  - The principle of evaluating separately the Active from Passive
  - The principle of intangibility
  - The principle of non-compensation
  - The principle of the prevalence of the economic over the juridical
  - The principle of the significance threshold

Accountancy rules:

Accountancy is to be obligatory kept in Romanian and in the national currency. For its own necessities of information accountancy of the operations done in a foreign currency may be kept both in the national currency, and the foreign currency.

Responsibility for organizing and managing accountancy is for its administrator or another person who has the duty to administrate the economical entity. The juridical entities organize and manage the accountancy, usually, for distinctive compartments led by the economic manager, the chief accountant or any other person with power of
attorney to do this job. These persons must have economic university studies and are responsible together with the subordinate staff for organizing and managing accountancy, abiding the laws.

Any economic operation which is done is written in a document which stays at the basis of records in Accountancy, this having a quality of justifiable document. The justifiable documents are primary documents which legally probe an operation.

The obligatory accountancy records are: The Diary Record, The Inventory Record and The big Book Record. These are used in strict accordance with their destination and are presented in an orderly manner and written in such a way that to allow at any moment identification and control of the accountancy operations being done.

The accountancy records and the justifiable documents are kept for 10 years in the archive, starting with the date when the exercise during which they were written ended, except the salary records which are kept for 50 years.

The financial exercise begins on the first of January and ends on the 31st of December, except for the first year of activity, when this starts on the date of the founding the company, meaning the date when it was registered at the Commerce Chamber.

The juridical entities who apply the current regulations have the obligation to write annual simplified financial reports, which must offer a faithful image of the financial position and the performance of the juridical entity for that financial exercise.

The administration council elaborates for each financial exercise a report which contains mainly the following:

- A faithful analyses of the evolution of the activity during the financial exercise and of the situation of the company at the end of this.
- Information regarding the probable evolution of the activity of the juridical entities.
- Information regarding the branches of the juridical entities.
- Information regarding its own shares bought or owned at any time during the financial exercise, the value of the dividends proposed by the administration council and subjected to approval of the general holders meeting
- Information regarding the activities in the field of research and development, or regarding the policy of environment protection.

The simplified financial records are signed by the person responsible with them and are given to the administration council,
signed in the name of the Council by its president and approved by the general holders meeting.

On request the annual report will be available to all shareholders.

b. making, presenting, approving and publishing the simplified annual financial reports.

For the SMEs in our country, the annual simplified records (balance, profit account and loss, accountancy policies and explanatory notes, and optional the cash flow reports) are written every semester and are handed to the territorial financial Administration until the 25th of the month.

Conclusions
As stated previously, the interference of accountancy of SMEs is reflected by respecting the principles and the rules according to the current law, showing a faithful image of the financial position and the performance of entity.

In the context of the business environment, these standards must be respected to ensure the success in business, creating a healthy and reliable business environment.

In other words, an enterprising who launches in a business can’t neglect the accountancy.

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Abstract
The current developments in the business environment as well as in the accountancy profession have significantly affected the way the financial reports are prepared. This study sought to assess the factors influencing complexity of preparing financial reports in the banking sector in Kenya. The objectives included assessing whether disclosures, adoption of International financial Reporting Standard, regulations and lack of competence by the preparers have contributed to the complexity of preparing financial statements. Using a descriptive study design, data was collected from ten banks registered in the Nairobi Capital Market. The study found out that the identified variables positively contributed to complications in the preparation of financial reports. Management interference, lack of guidance on interpretations and frequent updates of the standards were identified as the main challenges in preparing financial reports. Several recommendations were given to help simplify the process of preparing financial statements.

Keywords: disclosures, regulations, complexity, International Financial Reporting Standards (IFRS), competence
Introduction

One of the main responsibilities of management is to prepare financial reports which show the true and fair view of the company affairs and which are prepared in accordance with the requirements of the financial reporting framework. The purpose of management reporting is to inform the users of the financial information about the financial performance, financial position as well as the sources and uses of funds within a given period of time, so as to assist them in making informed economic decisions. Due to the increasing number of corporate scandals, it is evident that the financial reports have not been successful in providing users with information which could shield them from significant losses due to company collapses. The Accounting profession has been in intense scrutiny by regulators, investors and the general public, with the profession the regulators - both global and local - have taken significant measures in order to make the financial statement more relevant and reliable to the users. Such measures include increased regulation, new and changed accounting standards and increased disclosure requirements. While additional guidance and disclosure is often beneficial to the preparation and understanding of the elements within a company’s financial statement, the current state of corporate reporting has become too long, detailed and extremely complex, as the preparers purpose to comply with the increasing demands of the regulatory framework of the standard setters.

Complexity has been defined in different ways depending on the different stakeholders. The Advisory Committee on Improvements to Financial Reporting (CIFiR) defined complexity as the difficulty of the preparers to properly apply the Generally Accepted Accounting Principles and communicate the economic substance of a transaction or event and the overall financial position and results of a company. This definition is adopted for this study because it focuses on the preparers of the financial reports. The wave of globalization which was experienced in the 21st century has seen Africa being the trade target of many developed countries. This has increased inter-global transactions which demanded the need for a reporting framework that can portray the results of operations from all the countries where the global company has interest. This has led to the need for uniformity in financial reporting hence the advent of IFRSs. Madawaki (2012) identified that adoption of IFRS in developing countries has particular benefits which include increased quality of financial reports, attracting foreign direct
investments, reduction in the cost of doing business, increased cross border listing as well as making information more comparable thereby enhancing evaluation and analysis by global users. Despite of all these benefits adoption of IFRS increased the demands for more and high quality information. This has led to the regulators increasing the requirements for the preparation of financial reports with an attempt to achieve the goal of providing the much needed quality information hence extra efforts are required from the preparers.

In Kenya, the institute of certified public accountants of Kenya decided to adopt the international accountancy standards (IAS) later known as IFRS (1999). Such a decision meant that the companies prepare their financial statements in accordance with the requirements of IFRSs. Adoption of these new standards meant that they had to comply with regulatory requirement, disclosure requirements and adoption of new standards which are as dynamic as the business environment. The United Nations Conference on Trade and development carried out a review of practical implementation issues of IFRSs in Kenya (2006). The results of their study shows that the level of compliance was very low indicating that the preparers were facing challenges in implementing the new requirements. Despite of all these complexities in the field of financial accounting there is need for the financial report to remain relevant and achieve their primary goal of providing user with information that is useful for making their resource allocation decisions and assessing management’s stewardship. Thus this research is aimed at assessing the factors contributing to the complexity of preparing financial reports in Kenya.

**Statement of the problem**

Complexity of financial statements has become a critical issue not only in developing countries, but also in developed countries due to the dynamics of the complex business environment. According to Grant (2007-2008), 70% of CEO’s felt that the financial reports have become too complex for common investors to understand them. Transparency of financial information is a key concept in accountability for good corporate governance. The financial reports are seen as the eye through which stakeholders can see the acts of management and be able to assess their accountability for the company affairs. The financial statements need to be detailed enough to help users in analyzing and evaluating the results of the company’s performance as well as financial
position so as to make informed economic decisions. On the other hand, they need to be as simple as possible so that the users can be able to understand them in order to rely on them for their decisions.

The preparation of the financial reports is guided by the requirements of the regulatory frameworks being used in the country. In Kenya, The Institute of Certified Public Accountants (ICPAK) is responsible for the oversight of the accountancy profession. After the adoption of international financial reporting standards (IFRS) in 1999 as a requirement of ICPAK, all entities in Kenya are required to comply with the requirements, in the preparation of their financial reports, with an exemption of small and medium enterprises (UNCTD, 2006). In an attempt to comply with the requirements of the international standards, the financial reports have grown both in volume and complexity, due to the increased disclosure requirement, strict regulation and complex standards, while the competence of the preparers may not be improving at the same rate. Thus, there is need to identify the specific factors influencing complexity of preparing financial reports and give recommendation on the way forward in order to make the process more simpler and effective.

**Objectives and research questions**

Generally, this study is aimed at identifying the factors influencing complexity of financial reporting; specifically the study was aimed at achieving the following objectives:

1. To identify whether increased disclosure requirement has any significant effect on complexity of financial reports preparation
2. To identify whether adoption of international accounting standards have complicated the preparation of financial reports
3. To assess whether increased regulations have any effect on complexity of financial report preparation
4. To examine whether competence of the accountants has any significant effect on complexity of financial reports preparation
5. To identify other causes of complexity in the preparation of financial reports.

**Hypotheses of the study**

The study tested the following Null hypotheses

1. Increased disclosure requirement has no significant effect on the complexity of preparing financial reports
2. Adoption of IFRSs has no significant effect on complexity of preparing financial reports
3. The regulations have no significant effect on complexity of preparing financial reports
4. The competence of the accountants has no significant effect on complexity of preparing financial reports.

**Significance of the study**

Complexity of financial reports has become a critical issue in business discussion among the accounting professional. A lot is expected to be done in an effort to simplify the financial report for them to continue being relevant. This study is expected to contribute greatly on the issue of complexity of financial reporting in Kenya and the world, in general. It is expected to provide literature from Kenyan perspective on the factors influencing complexity of financial reporting. This will assist the regulators in their struggle of making financial reporting more simplified and relevant for the users. It will also assist AICPAK to understand the challenges faced by accountants hence provide a basis for training materials. It will also assist the regulators in identifying the gap between theory and practice hence improve on their professional training curriculum.

**Scope of the study**

This study is aimed at assessing the factors influencing complexity of financial reporting in Kenya. It is focused on banks listed in Nairobi stock exchange in Kenya because they are expected to comply with the requirements of IFRSs by the regulatory bodies.

**Limitation of the study**

This study was focused on only banking sector specifically on those banks which are listed on the Nairobi Stock Market by the end of 2011. Thus it does not include those other banks which are not listed. It also focused to obtain data only from those who participate in the preparation of the financial reports.

**Literature review**

**Introduction**

This chapter reviews the literature related to complexity of financial reporting with the aim of identifying the existing gaps on the
field of financial reporting from previous studies. The concept of complexity of financial reporting has gained relevance over the last few years. Several studies have been carried out on the relevance of financial reporting with the majority targeting on the quality of financial information, (Barth & Schipper 2008, FASB 2008, Leuz & Wysocki 2008). Other studies have specifically focused on complexity of financial reporting, Grant (2008) carried out a survey on chief finance officers and identified that 70% of them thought that the financial statements were too complex to be used by an average investor. ACCA carried out a survey on the same complexity of financial reporting brought about by complex business environment and identified the specific standards which are considered by the preparers of the financial reports as complex.

**Complexity brought about by Disclosures**

Due to the adoption of IFRS, there is an increased requirement on disclosures with the aim of making the financial statements more understandable. While additional guidance and disclosure is often beneficial to preparing and understanding of the elements within the company’s financial statement, the increased disclosure requirements add to the volume of the annual reports which lead to high risks of errors and compliance failure. A survey carried out by KPMG on Disclosure overload and complexity identified that disclosure by 25 fortune 100 companies expanded by 16% during the 6 years under review while the footnotes disclosures grew by 28% over the same period. In their conclusion, increased disclosure was identified as a key factor leading to complexity in financial reporting.

The aim of disclosures is to make the financial statements more complete, clear and concise so that users are able to understand and rely on them in making decisions. Due to the complexity of the business environment the preparers of financial reports try to make sure that they add disclosures to make the financial statements more understandable and simpler for the stakeholders, in the process of simplifying the reports the volume of the disclosures has increased significantly raising a question of whether these disclosures actually add or reduce value of the reports. Dagiliene (2009) identified that the adoption of IFRS allows for a piece meal approach to disclosures which has led to continuously expanding volume of disclosure notes in the financial reports. In addition, the move to the use fair value accounting has led to increased
disclosures because of the need to disclose all valuation assumptions related to the use of fair value accounting. The preparers of the financial statements are required to comply with the IFRS disclosure requirement. These disclosure requirements are based on professional judgment of the preparers to determine the extent of the disclosures, because the accounting standards only provide guidance to the minimum disclosure requirement (Miller, 2010). The accounting profession has not provided any professional judgment framework which can assist the preparers in the use of judgment in a more consistent manner, leaving the preparers with no proper basis of determining how much of the disclosures should be enough to allow understandability of the financial reports.

**Complexity caused by international financial reporting standard**

The quality of accounting information is affected by many factors among which accounting standards have been identified as an important factor. The quality of accounting standards influences the users’ perception of the financial information (Khanagha, 2011). Although, adoption of IFRS has been associated with particular benefits; there is evidence that at times those benefits may not be realized by companies (Barth 2008, Miller 2010, Chen, Tang, Jian and Lin 2010). A study carried out by Outa (2012) in Kenya concluded that adoption of IFRS is not consistent with the benefits promised by international Accounting Standard Board. According to the CIFiR report, complexity in financial reporting includes unnecessary difficulties imposed by a financial reporting regime that creates uncertainty in identifying, interpreting and applying the relevant IFRSs. The international standard setters design the standards based on the developed countries which have different operating environments, which makes their applicability too difficult for implementers in developing countries which are characterized by undeveloped regulatory systems to enforce the use of global standards. A common concern in research literature is that these accounting standards are too complex in structure to be understood by the most preparers of financial reports.

**Complexity brought about by the professional regulation**

Due to the global scandals, the regulatory bodies have embarked on constant assessment on how they can make the financial reporting more reliable and relevant to the users, as well as the preparers.
According to Glassman (2006), the regulators in their role as standard setters have issued more than 200 new documents in the form of emerging issues task force (EIFT), consensuses, accounting standards, staff accounting bulletin and financial reporting releases as well as interpretive guidance in letters and speeches. All these new documents come with new requirements which are expected to be complied with by the preparers of the financial statements. According to Miller (2010), some users and preparers of financial information argue that over time, financial reporting has become a burdensome compliance exercise with decreasing relevance to investors. Similar reactions were echoed by Hassan (2008), who assessed the impact of market regulation on the usefulness of financial information. His conclusion was that the regulators have made financial reporting too complex both the preparers and users in Asia.

**Competence of the preparers of financial reports**

Due to the changes of the business environment the aspect of financial reporting has not been left behind. The regulatory frameworks have changed thus requiring similar change to occur in the way financial reports are prepared. The adoption of IFRS requires that the preparers report the economic substance of transactions rather than their legal basis. This requires the accountants to be able to analyses the economic substance of a business events consistent with current definitions of the elements of the financial statements. A general short coming cited by CIFIR is that the accounting education for both graduate and undergraduate programs has traditionally concentrated on the understanding of mechanics and rules rather than the full understanding of relevant principles. Hence, it is importance for the preparers to continuously update their knowledge in line with current developments in the business environment. A study carried out in Kenya by the United Nations identified that majority of the Kenyan accountants complete the required KASNEB exams but do not register for membership yet it is through the members where ICPAK provides the current guidance pertaining new standards. This implies that most of the preparers do not have up to date information concerning developments in the profession (Outa, 2011). This implies that the preparers have knowledge short fall which may affect the accuracy of the reports hence making the preparation a cumbersome exercise for them.
Theoretical framework
This study is based on the Agency theory. The theory models the relationship between the principal and the agent. An agency relationship arises whenever one or more individuals, called principals, hire one or more other individuals, called agents, to perform some service on behalf of the agent (Jensen and Meckling, 1976). In a company setting the shareholders are the principals who are the owners of resources while the management is the agent to whom the responsibility of controlling the resources has been delegated. It is important for the managers to give accountability on how they have carried out their stewardship responsibility. These calls for the need to communicate to the shareholders in a clear, precise and simple manner in which the shareholders who may not be competent in the technical language of business can understand. If the reporting exercise becomes too complex there is likelihood that the reports prepared will not be understood by the shareholders hence the need to reduce complexity in whatever form from the financial reports so as to enhance the communication between the principle and the agent.

Conceptual framework
A conceptual framework is a visual or written representation that explains graphically or in narrative form the main factors, concepts and variables and their presumed relationships among them (Maxwell, 2005). It shows the independent and the dependent variables used in the study and how they relate to each other. The variable that the researcher wishes to explain is the dependent variable while the variables that causes changes or influences the dependent variable are the independent variables. In this study, the dependent variable is the complexity of preparing financial reports while the independent variables are the increased disclosure requirements, adoption of international financial reporting, increased regulations and competence of accountants.

Methodology
Research Design
This research seeks to assess the factors that influence complexity of preparing financial reports with key emphasis on listed banks in Kenya. The influencing factors which have been identified from an in depth study of literature are transformed into measurable figures so as to assess whether there is any significant relationship
between the independent variables and complexity of preparing financial report. Thus, this study uses the quantitative study design. According to Hopkins (2008) quantitative research designs are used when in quantitative research the aim is to determine the relationship between one thing (an independent variable) and another (a dependent or outcome variable) in a population. Quantitative designs are of two types, descriptive where the subjects are measured once and experimental where the subjects are measured before and after the experiment. In this study the aim is to test whether the identified factors have contributed to financial reporting complexity and such it adopts the descriptive design.

**Target Population and Sample**

The purpose of this study is to identify the factors that influence the complexity of financial reports among the banks listed in Nairobi Capital market. In this study, complexity is assessed from the preparers perspective thus it focused to get information from those involved in the financial reporting roles in the level of Assistant accountants, Accountants, Senior Accountants, chief finance officers and Chief Executive Officers who are working in the banking sector. The choice for the banking sector is that they deal with financial instruments which have been identified from literature as the most complex area of preparing financial statements (Aswath, 2006). 40 questionnaires were randomly distributed among the 10 banks listed in Nairobi Capital Market; out of these 32 were replied implying 80% response rate.

**Data collection methods**

Primary data was collected by means of a structured questionnaire directed to the preparers of financial reports. The questionnaires were administered personally to minimize non-response. The questionnaires had two sections, Section A included the personal profile of the respondents, while section B included general questions which were based on the research objectives. Section B included both - open and closed ended questions - which were based on a five point Likert scale. A pilot study was conducted at one bank to test the validity of the instrument. Cronbach’s Alpha (α) which is an instrument among others was used to determine the coefficient of reliability using the following formula;
Factors influencing complexity in financial report preparation

\[ \alpha = \frac{k}{k-1} \times (1 - \frac{\sum S_i}{S^2}) \]
\[ \alpha = \frac{5}{5-1} \times (1 - \frac{0.324198}{0.762056}) = 71.82\% \]

According to Kline (1999), a rule of thumb in using Cronbach’s Alpha indicates that a coefficient of between 70% and 80% is acceptable. The researcher therefore concluded that the data collected using the questionnaire was statistically suitable based on the above results.

**Research Model**

The research had one dependent variable (complexity) and four independent variables which included adoption of IFRS, disclosures, regulation and competence. The study adopted a simple regression model based on the dependent variable and IFRS which was expected to have significant influence on complexity. The other independent variables were eliminated in model to control the effect of multicollinearity. The model was specified as follows:

\[ C = a + b_1 \times F + e \]

where,
- \( C \) - Complexity
- \( F \) - IFRS
- \( E \) - Error term
- \( a \) & \( b_1 \) - regression coefficients

Thus from the regression table results the model can be expanded to

\[ C = 1.64 + 0.63 \times F + e \]

If \( F \) has the highest value of (5) in the scale then \( C = 1.64 + 0.63 \times 5 = 4.79 \) which implies that preparing financial statement is a very complex exercise. While if \( F \) has a low value of 1, \( C = 1.64 + 0.63 \times 1 = 2.3 \) which implied that the process of financial report preparation was not complex.

**Data processing and analysis**

Data collected was processed using window 07 Excel work sheets as well as descriptive statistics. The filled questionnaires were given numbers 1-32 so as to enhance the quality of the data entry. The filled questionnaires were tabulated using windows Excel data analysis tools. The company profile, the personal profile of the respondents as well as objective five where analyzed using descriptive statistics such as percentages and frequency counts because they are descriptive in nature.
Regression Analysis
The researcher regressed IFRS on complexity and the following were the results:

<table>
<thead>
<tr>
<th>Table 1. Regression Statistics</th>
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</thead>
<tbody>
<tr>
<td>Multiple R</td>
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<tr>
<td>R Square</td>
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<tr>
<td>Adjusted R Square</td>
</tr>
<tr>
<td>Standard Error</td>
</tr>
<tr>
<td>Observations</td>
</tr>
</tbody>
</table>

The coefficient of determination (R square) of 0.88 showed that Adoption of IFRS is a strong determinant of complexity in preparing financial statement. This is also explained by the regression results from the ANOVA table, which gives a very low P value of almost zero (0.00018), while the F value of 18.57 is high.

<table>
<thead>
<tr>
<th>Table 2. ANOVA results</th>
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<tbody>
<tr>
<td>Df</td>
</tr>
<tr>
<td>Regression</td>
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<tr>
<td>Residual</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Hypothesis testing
The researcher used the correlation analysis to test hypothesis. Since the sample size used in analysis was 32, normal probability distribution statistic was used in the analysis. All the data were analyzed at a significant level of (alpha) $\alpha = 0.05$. For all the four hypotheses the decision criteria was as follows.

The null hypothesis ($H_0$) was rejected for observed z values which were greater than $|1.96|$.  

**Hypothesis one**
The Null hypothesis stated that Increased disclosure requirement has no significant effect on complexity of preparing financial report ($H_0$: $Y_{\text{comp, dis}} = 0$). The observed Z value for disclosure was (32.38) greater than
1.96 the null hypothesis \((H_0)\) was rejected and the Alternative hypothesis \((H_1)\) was accepted. Thus the researcher concluded that the increased disclosure requirement complicated the preparation of financial reports.

**Hypothesis two**

The second null hypothesis stated that adoption of IFRSs has no significant effect on complexity of preparing financial reports. \((H_0: Y_{comp, ifrs} = 0)\). The observed Z value was 21.05 which is greater than 1.96 hence the null hypothesis was rejected and the alternative \((H_1)\) was accepted. The researcher concluded that adoption of IFRS has complicated the preparation of financial reports.

**Hypothesis three**

The third hypothesis stated that increased regulations have no significant effect on complexity of preparation of financial reports \((H_0: Y_{comp, reg} = 0)\). The observed Z value was 30.0 which is greater than 1.96 thus the null hypothesis that increased regulations has no significant effect on complexity of financial reporting was rejected hence the alternative was true thus accepted. The researcher concluded that increased regulations have increased the complexity of preparing financial reports.

**Hypothesis four**

The fourth hypothesis stated that the competence of the accountants has no significant effect on complexity of preparing financial reports \((H_0: Y_{comp, com}= 0)\). The observed Z value was 31.39 which are greater than the critical value (1.96) hence the null hypothesis was rejected while the alternative was accepted. The researcher concluded that the level of competence of the preparer has a significant effect on the complexity of preparing financial reports.

**Research findings and discussions**

The researcher identified that the variables under study had significantly affected the complexity of preparing financial reports. The disclosure requirement measure by the increased number of pages, completeness and difficulty in preparing have been proved to add to the difficulties experienced in preparing financial statement. The number of pages on average of the annual report was 178, with the majority of respondents (75%) indicating that they experienced difficulties in determining which disclosures are relevant to be included in the financial reports. 69% of the responded felt that the disclosures were too many which increased the time required for preparing the financial
reports. This is in line with other studies concerning to volume of disclosures, (Dagiliene, 2009). Another concern which was raised is that some of the managers interfere with the disclosure requirements where they are opposed to full disclosure and want to influence what is disclosed and to what extent it should be disclosed.

Concerning the adoption of IFRSs, 45% of the accountants, 62% of senior accountants, 58% of CEOs and 20% of the assistant accountants felt that the preparation of financial statements using IFRSs has become a very complex exercise due to the complex nature of the standards. The low percentage of the assistant accountant may be due to the limited involvement in the use of IFRS. A general concern was that the standards are difficult to interpret and at times they are not clear as to what extent they should be applied. This is in line with previous studies which questioned the clarity of the standards and their interpretations (Miller, 2010). 43% of the respondents raised concerns that the managers do not appreciate the adoption of IFRS hence they are reluctant to organize trainings or sponsor their accountants to attend seminars organized by ICPAK. Further, this study has identified that the most complex standards are the financial instruments, share based and performance based payments, Provision and taxes especially in banks operating in more than one country and consolidation of overseas branches.

With regard to the effect of regulations, the study has identified that they have a significant relationship with the complexity of preparing financial reports, even though the majority (63%) of respondents said that they receive information concerning the new standards this information is not very clear as to the requirements hence it leads them to seek guidance from the regulatory bodies. This is in conformity with the work of Glassman (2006), who found out that companies follow multiple regulatory bodies which provides overlapping regulations which complicates the preparation of the financial statement. Another concern raised was that the revision to the standards is extremely frequent such that the preparers do not have time to familiarize themselves with the new standards. 48% of the respondent were concerned that they do not receive the updates on the revised standards through formal means instead they get to know of the revisions from peers working in other bank.

Regarding the competence of the preparers, this study has identified that there is a strong positive relationship between the
Factors influencing complexity in financial report preparation

competence level and the complexity of preparing financial reports. The accountants with higher experience and qualification expressed high concerns that preparing financial reports have become very complex. This could be due to the fact that those who are more qualified are given the responsibility of preparing reports using IFRS because they are considered difficult, (45% of the accountants, 62% of senior accountants, 58% of CEOs and 20% of the assistant accountants). Some of the preparers especially those with experience in preparing financial statements for a long period of time expressed concerns that they do not understand some of the standards and hence did not see any value which the new standards have brought to the financial reports. Instead they have expressed concerns that using IFRS with no proper guidelines has increased the probability of errors and manipulation of the financial reports.

Conclusions and recommendations

This study was aimed at finding out the factors which determine the complexity in preparing financial reports in the banking sector. It found out that the level of disclosures as measured by the number of pages, completeness and difficulty in preparing disclosures has a significant relationship with complexity of preparing financial reports interference from management in determining what to disclose also posed a dilemma for the preparers. It further identified that adoption of IFRS has complicated the preparation of the financial reports due to difficulty in interpreting and applying the standards as well as lack of clarity in the formulation of the standards. The regulations also were found to contribute significantly to the complexity of preparing financial reports due to unclear information provided on the interpretations, lack of guidance as well as frequent changes to the standards. The competence of the preparer of the reports was raised as an issue which may have made the reporting exercise difficult. This is because the respondents expressed concerns that the training seminars organized by ICPAK are too expensive for individuals to afford hence they fail to develop their skill and knowledge in line with current developments of the profession. Similar concerns were expressed that the education system in the country does not prepare graduates fully for the accounting practice because it is too theoretical and it is not updated in line with the current developments in the accounting profession. Other concerns which were raised as causes of complexity included lack
of clear guidance from the profession, lack of participation by the preparers in standard setting process, increased number of standards which makes the standards appear as if they are rule based instead of principle based, a very fast rate in which the standards change and lack of monitoring tools for compliance with the reporting standards.

In conclusion, disclosures, adoption of IFRS, regulations and lack of competence have been identified as some of the factors influencing the complexity of preparing financial reports by the banking sector in Kenya. From the above findings several recommendations have been made

- ICPAK should try and reduce the charges for accounting seminars especially those concerned with use of IFRS to give a chance for all accountants to upgrade their knowledge;
- The accounting curriculum should be amended to incorporate current developments of accounting profession;
- The regulators should be empowered by the company act to monitor compliance with requirements of preparing financial statements
- The companies should take the initiative for developing their accountants by organizing in house training seminars;
- The IASB should continue with the efforts of simplifying the preparation of financial reports.

**Future Research**

This study focused on the factors influencing complexity of preparing financial statements by banking sector. A similar study can be carried out focusing on other stakeholders to assess whether similar conclusions can be made. It focused on listed companies who are expected to be more qualified to apply IFRS, similar study can be done based on SME to identify whether they share the same perceptions.

**Bibliography**


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Relevance of Intangible Assets. Australian Accounting Review, (18) 237-247


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