THE ROLE OF THE EXTERNAL AUDITOR
IN CORPORATE GOVERNANCE:
THE CASE OF COMPANIES LISTED IN
THE NYSE EURONEXT LISBON

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Abstract

This study investigates the effects of the presence of the external auditor on corporate governance in Portugal, in the way listed companies are managed, based on the verification of compliance with the corporate governance regulations of the Securities Market Commission, as well as the transparency of information and the reduction of agency problems, fraud and economic crimes. By comparing government reports of companies listed on NYSE Euronext Lisbon, during several periods and with surveys conducted in the 1st half of 2013 in Portugal to the external auditors responsible for the majority of the legal certification of accounts of companies during 2007 to 2011, a significant direct relationship in the fulfillment of the recommendations of corporate governance and its verification by the external auditor is concluded. Based on multiple regression and multinomial logistic models, it is concluded that a greater involvement of the ROC in complying with corporate governance recommendations, allows for greater transparency of information and a reduction of agency problems, fraud and economic crimes.

Keywords: Legal Certification of Accounts, Governance of Listed Companies, Transparency of Information, Agency Theory

1. INTRODUCTION

To understand the effects of the presence of the external auditor on corporate governance in Portugal, that is, to know the way listed companies are managed, to verify the compliance with the corporate governance regulations of the Securities Market Commission (CMVM), to know the transparency of information, the reduction of agency problems, fraud and economic crimes, all this understanding, have a crucial relevance to conclude about the corporate strategy followed by many companies listed on NYSE Euronext Lisbon.

Traditionally, corporate governance means the way a firm controls and directs its institutional systems, ethics, social responsibility and accounts. The idea is to promote transparency and fairness, by monitoring performance and looking for accountability. Thus, external auditors serve as one of the primary protectors of corporate governance in any entity. To keep with the 2002 Sarbanes-Oxley Act, external audits are required of most publicly listed companies.

The most important role of external auditors in corporate governance, should be to protect the interests of shareholders. The external audits are done independent of the organization’s influence. External auditors report the state of a company’s financial situation and certify the validity of financial reports that may have been released. All the information must be accurate and reliable. The accounting principles used by the firm should be appropriate. Another role of external auditor is to introduce policies to ensure accountability in the company. For example, external auditors may recommend penalties for officers who manipulate financial statements by cooking accounting numbers or inflating figures. External auditors review the security measures that a firm has in place against corporate fraud or corruption. Besides assessing potential risks, auditors also analyze the overall risk tolerance of the firm, as well as, all the initiatives the company has made toward mitigating risks. In addition, external auditors help promote corporate governance by conducting period risk assessment.
External auditors can help ensure good corporate governance by developing efficient crisis-management plans to be used in the event of allegations of corruption or fraud. A plan of this type, involves assigning responsibilities to all administrative officials. Thus, if the company becomes involved in a crisis, officials have an plan to keep confidence among investors. Crisis-management plans may also include control indicators, that are to be used with the media and law-enforcement officials. In addition, an external auditor should always have a good relationship with regulators. Most regulators are in a good relation with firms that appear to have clear operations. External auditors evaluate the organization of a company for compliance with regulations. Most regulators always trust company disclosures after an auditor attests to them.

The essence of a good corporate governance is to do right things and to do them in the right way. Everyone involved in corporate governance, i.e. board of directors, shareholders and auditors, should work together to run efficiently the organization for the interest of all. In addition, a good corporate governance implies strong internal control systems, procedures and policies. Corporate governance means acceptance of management as trustees on behalf of the stakeholders and should maintain commitments to the ethics and values in organization.

Lately, a view is coming that external auditors should play a very important role in establishing good governance. This should, or not, mean to expect them to cross the established borders of original audit functions. The idea is to make the auditors much more conscientious of their responsibilities and, in consequence, to be more effective while restricting themselves to their term of reference. For that, auditors are not required to traverse their area of operation. Whatever they are expected to contribute towards good governance shall therefore be from within their range or sphere of activity. That is, it is the quality of their performance that will make all the difference.

In Portugal, the Securities Market Commission (CMVM) is the body that regulates and monitors the stock market. The issuance of corporate governance recommendations in Portugal followed the international legislation of the various corporate models and allowed the harmonization of voting procedures, investor information, and size of corporate bodies, remuneration systems, external audit procedures and management of conflicts of interest. In historical terms, the CMVM published an initial version of the current recommendations in October 1999, based on the document "SEC Recommendations on the Governance of Listed Companies". This version presented measures for good governance of listed companies and has been reviewed every two years.

The civil liability of the ROC as external auditor is civilly liable for damages caused to society or third parties due to deficiency (fault) of the report drawn up by it (article 10/1 CVM) and contractual liability to society, guilt is presumed. However, in Portugal the independence of the ROC/SROC is guaranteed by several legal constraints of the profession by preventing them from being members of the board of audited companies, performing review or audit functions in the accounts in companies in which they have direct or by interposed person, or with whom they have relations (labor, service provision, etc.) that are independent. In order to ensure its independence, the ROC can only be dismissed for just cause.

As such, in 'public interest' companies (listed companies and credit institutions, as stated in article 2 of Decree-Law No. 22/2008, of November 20), ROCs are mainly prohibited from carrying out review or audit when self-review or self-interest situations occur, or are prevented from performing management functions for up to three years after reviewing. In this sense, in practice, the civil liability of SROC/ROC is limited to incorrect financial auditing, based on the accounts and corporate governance documents provided by the companies. This responsibility assumes that the documents provided by the management body and supervisory body give a true and fair view of the entity's financial position based on the principle of good faith.

Thus, the civil liability of fraud and economic crime of the company, when it is not due to the incorrect audit review, in principle, falls on the internal organs of the company, namely in the administrative body and in the supervisory body, when it is a fiscal council, Latin model; single tax on the Anglo-Saxon model; or Internal Statutory Auditor and general and supervisory board, in the German model. As a result of the foregoing, the civil liability of the external auditor is safeguarded vis-à-vis the company's bodies by means of signature by the person in charge of the Management Body and the Supervisory Body of the "Statement of the Management Body" of the work of the external auditor, which appears in the permanent "file" of the ROC. In the absence of a signature by one or both parties of the declaration obligation, this constitutes a limitation to the scope of the examination of the ROC and must be reason for a reservation or excuse of opinion, as stated in the review/audit guideline.

The objective of this investigation is to conclude, or not, if there is a significant direct relationship in the fulfillment of the recommendations of corporate governance and its verification by the external auditor (ROC or SROC). In Portugal, the external auditors can be an individual statutory auditor, called "Revisor Oficial de Contas" (ROC), or a statutory auditor firm, called "Sociedade de Revisores Oficiais de Contas" (SROC). Our findings appointed that a greater involvement of the ROC/SROC in complying with corporate governance recommendations, allows for greater transparency of information and a reduction of agency problems, fraud and economic crimes.

The structure of this article is as follows: 1) Introduction; 2) Literature review; 3) Research methodology; 4) Empirical results; 5) Discussion and conclusion.

2. LITERATURE REVIEW

Corporate governance has become a common name in the current global business literature. The Cadbury report defines corporate governance as "the system by which companies are directed and controlled". The Organization for Economic Cooperation and Development (OECD) defines
corporate governance as “a set of relationships between a company’s management, its board, its shareholders and other stakeholders that provides a structure through which the objectives of the company are set and the means of attaining those objectives and monitoring performance are determined”.

According to OECD, the corporate governance structure specifies the distribution of rights and responsibilities among different participants in the company, such as, the Board, managers, shareholders and other stakeholders. This includes the procedures and rules for making decisions on corporate affairs. The inclusion of the word “relationships” in the OECD’s definition means that corporate governance is not simply complying with regulations.

The responsibility of external auditors in the area of corporate governance, is to provide assurance that the corporation is in rational compliance with relevant laws and regulations, is conducting its affairs fairly, and is maintaining effective controls against employee conflict of interest and fraud. An audit committee consisting of independent directors can serve the company’s management and thereby, acting as a sort of assurance to the shareholders that they will have full disclosure of correct information. It is generally accepted that in good corporate governance, the external auditor should suggest people to act as independent directors to run the company in the right direction, to defend transparency and accountability and performance standards for investors and lender and protection for shareholders.

Normally, shareholders of the company place very high trust on the auditor’s report, which apparently shows the true and fair view of the accounts of the company. Besides, one defend that external auditors should perform their duties with extreme care and vigilance to ensure that there is no illegal or improper transaction. Auditor independence would be safeguarded if audit committee were made up of a majority of independent and non-executive directors, and this might signify that their independent status would contribute to auditor’s independence through bridging communication network.

The big four CPA firms, Price Waterhouse Coopers, Deloitte, Ernst & Young, and KPMG, as well as the Committee of Sponsoring Organizations (COSO), recommended certain oversight practices for external auditors to follow, providing guidelines about the audit responsibility in evaluating and strengthening corporate controls.

It is common that the external audit function is determined by the audit committee that plays a major role in selecting the external auditors since it nominates them. On the other hand, European Union Directive 2006/43/EC, Articles 41.3 and 41.4, states: “In a public-interest entity, the proposal of the administrative or supervisory body for the appointment of a statutory auditor or audit firm shall be based on a recommendation made by the audit committee. The statutory auditor or audit firm shall report to the audit committee on key matters arising from the statutory audit, and in particular on material weaknesses in internal control in relation to the financial reporting process”.

According to Vitols (2011), corporate governance aims to resolve problems which arise from the principal-agent relationship, whereby owners have an interest in increasing the value of their shares – whereas managers tend to be more interested in “the private consumption of firm resources and the growth of the firm”. According to Hopt (2002), an improvement of corporate governance in Europe, in the aftermath of Enron, would require the involvement of intermediaries such as external auditors. Furthermore, he notes that the control of the Board by Auditors is not only the “most common”, but also the “most prominent control mechanism”.

According to Abbott et al. (2007), outsourcing routine internal audit activities, not only constitutes a threat to external auditor’s independence – given its repetitive nature, but could also impair internal audit independence and generate disagreements relating to financial reporting and internal control issues between the external auditor and management. Arguments for engaging the external auditor to pursue non-routine tasks, include the fact that kind of tasks are not only non-repetitive by nature, they also require specialized knowledge which internal auditors may not be able to acquire in house. In addition, the use of external auditors in performing non routine tasks may be more efficient.

Other advantages which have been seen in engaging the external auditor’s knowledge – as opposed to that of an outside service provider include: i) synergies which are coming from “knowledge spillovers” between the outsourcing of specific audits and which would generate a more understanding financial statement audit; ii) the fact that the external auditor’s expertise of the client’s accounting systems and functions facilitates collaborative efforts between the internal and external auditors – which, in turn, generates greater efficiency; and that iii) the external auditor’s expertise of the client’s accounting systems, probably will reduce the risk of “budget overruns”.

When the correlation between financial audit and corporate governance is encountered, the question is how the corporate governance variables affect financial audit. For some authors, a proxy for financial audit is audit fees. The relationship between auditor’s remuneration and other corporate governance variables depend on board characteristics. For instance, O’Sullivan (2000) found that larger the proportion of non-executive directors is, higher the audit fees are, while Gul and Tsui (2001) report positive correlation between high cash flow and audit fees.

Carcello et al. (2002) proved that the financial audit remuneration depend on the board of directors independence. It seems that as the board is more independent, it is more inclined to pay higher fees to external auditor. Opposite of them, Steward (2006), find no evidence to support the correlation between audit fees and the independence of the board of directors. In another research conducted by Mitra et al. (2007), the results emphasis that a company is more inclined to pay higher audit fees if it has a diffused institutional ownership.
Negative results were found by Frankel et al. (2002) who point out that the existence of non-audit services can affect auditor independence and can encourage the appearance of discretionary accruals. On the other hand, Larcker and Richardson (2004), consider that these particular elements come if the company has a weak governance system. Moreover, it seems that auditor’s reputation mitigates this kind of practices.

Regarding other elements of corporate governance and their correlation with the auditor’s fees, an important role is given to the audit committee. Researches such as those conducted by Abbott et al. (2003) or by Gaynor et al. (2006), report a positive relationship between the existence of the audit committee and the amount the auditors receive for their auditing activity. Similar results were detected by Voller et al. (2013), Steward (2006), while other researches such as the one conducted by Cohen and Hanno (2000) consider that the risk associated with the auditor’s activity should be mitigated once the existence of audit committee is revealed.

This article has the objective of verifying the relationship in the fulfillment of the recommendations of corporate governance and its verification by the external auditor (ROC/SROC). This work is very important and also necessary, since it never have been done in Portugal, considering companies listed in NYSE Euronext Lisbon. Our goal was to conclude about the effects of presence of external auditors (ROC/SROC) in complying with corporate governance recommendations, trying to understand if there were greater transparency of information and a reduction of agency problems, fraud and economic crimes.

3. RESEARCH METHODOLOGY

In the methodology of the research, the procedures applied to studies of the social sciences were followed according to the methodological rigor of higher education in Portugal. Thus, the target population is ROC/SROC of trading companies operating on the NYSE Euronext Lisbon market. In this sense, the reporting population is all ROC or SROC of the commercial companies operating on the NYSE Euronext Lisbon market, from 2007 to 2011 inclusive, 41 in total (see Table 7 in Appendix).

In addition, the sample is all the external auditors of the commercial companies operating on the NYSE Euronext Lisbon market, which were audited at least once by one of the four reference auditors working in Portuguese territory in a year of the investigation (from 2007 to 2011) by Deloitte & Associates, SROC SA, EY Audit & Associates - SROC, SA, PricewaterhouseCoopers - Auditores e Consultores, Lda and KPMG & Associados, Sociedade de Revisores Oficiais de Contas, SA.

3.1. Research question

In order to answer the question/problem "how to increase transparency in corporate governance on the NYSE Euronext Lisbon market by the action of the external financial auditor?" the study aimed to confirm that with greater intervention of the external auditor in compliance with the CMVM recommendations, will be greater transparency of information and reduction of agency problems, fraud and economic crimes.

Currently, the annual accounting documents required of these companies are: report and accounts (individual and consolidated); corporate governance report and management report. In this sense, the governance report is extremely important for stakeholders to understand the structure and business of society that translates into results and heritage.

The assumptions were as follows:

- The greater the information of the government of society, the greater the transparency of the government of society.
- The greater the transparency of the government of society, the less the problems of agency, fraud and economic crimes.

3.2. Variables

The variables presented are ordinal qualitative variables, because their values include order relations, although they are not metric.

3.2.1. Independent variables

In the verification of this study, the independent variable is compliance with the recommendations of the Code of Corporate Governance 2010. The independent variables can take the following classifications: non-existent recommendation; recommendation blank; recommendation not applicable; recommendation not fulfilled; recommendation partially fulfilled; or recommendation fulfilled.

3.2.2. Dependent variables

In the verification of this investigation, the dependent variable is the verification of compliance with the recommendations by the external auditor of the Code of Corporate Governance 2010 (see Table 6 in Appendix). The dependent variables can be of the following order: unknown recommendation; recommendation without opinion; recommendation never/rarely fulfilled; recommendation fulfilled a few times; recommendation regularly followed; or recommendation too often.

3.2.3. Hypotheses

In the bidirectional formulation of the dissertation hypotheses, there was the concern to consider the following elements: theoretical consistency; verifiability; sense of relationship and statement of relationships. In the characteristics of the validation of the hypotheses, we try to respect the characteristics: logical consistency; verifiability; simplicity; specificity; theoretical support and relevance.

Hypothesis I (H1): Greater involvement of the external auditor in complying with the CMVM recommendations on corporate governance allows for greater transparency of information and reduction of agency problems, fraud and economic crimes.
Hypothesis II (null hypothesis, H2): Greater involvement of the external auditor in complying with the CMVM recommendations on corporate governance does not allow for greater transparency of information and reduction of agency problems, fraud and economic crimes.

3.3. Reports and surveys

In the collection of the quantitative data in order to validate the problematic question through the statistical tests to its hypotheses, we counted the compliance with the recommendations of the company’s government reports and external auditors’ surveys.

3.3.1. Corporate governance reports

In the first type of analysis, we performed a survey of the compliance number of each recommendation, in a total of 82 recommendations, of 205 reports of 41 companies listed on the NYSE Euronext Lisbon from 2007 to 2011. This survey followed the sample and was verified for each recommendation its compliance, or in case of non-compliance, its associated reasons, based on the “comply or explain” principle.

3.3.2. Surveys to the statutory auditors and external auditors

The surveys were directed to the ROC/SROC of the three main urban centers, evenly distributed throughout the territory (Porto in the north, Coimbra in the center, and Lisbon in the south). They were carried out with letters of introduction during the period from January to May 2013. Likewise, we sought to obtain diversity in the sample, taking into account the professional experience of the respondent, in order to achieve a greater confidence interval.

In this sense, the surveys were structured in such a way as to establish a direct relationship between compliance with the recommendations and the external auditor’s compliance with them. These were 17 questions based on the Likert scale, that is, scale with a series of five propositions of compliance with the recommendations that the respondent classified as “never/rarely”; “sometimes”; “regularly”; “frequently”; “Without opinion”.

In total, 42 audit professionals were interviewed, and of the 4 reference auditors (Deloitte & Associados, SROC, SA; EY Audit & Associados - SROC, SA; PricewaterhouseCoopers - Auditores e Consultores, Lda; KPMG & Associados, Sociedade de Revisores Oficial de Contas, SA, which at least once audited one of the commercial companies studied), corresponds a percentage of response by the external auditor working in this SROC and in some respondents, the own direct responsible for about 4 to 5 legal certifications of accounts approximately 87.76% of the sample.

3.4. Interviews

The structured and focused interviews were carried out with specialists of excellence related to the area of financial auditing and corporate governance, such as external auditors, administrators and teachers of finance, financial accounting and corporate governance, in several higher education institutions in Portugal and in the United Kingdom, for example, in the Faculty of Economics of Porto, London School of Economic and Political Science. These were carried out in the period from January to August 2013, the majority in person, and allowed to verify with more confidence the Hypothesis I. The interviews were held in the UK, because London is a crucial financial center in the European and world economy and dictates the trends of economic models on the European continent.

4. EMPIRICAL RESULTS

The specific objectives were:

1. Search and develop scientific documentation focused on the relationship of listed companies’ governance and external financial audit in the recent past (2007 to 2011).
2. Analyze the work of the external financial auditor related to corporate governance regulations (national and international).
3. Identify factors that delimit the transparency of corporate governance information and the activity of the external financial auditor in corporate governance.
4. Examine, interpret and evaluate the work of the external financial auditor in corporate governance processes.

The expected results were:

1. Understand the action of the external financial auditor in corporate governance.
2. Examine, interpret and evaluate the work of the external financial auditor in the management and corporate governance processes.
3. Explore the realities of financial activities of corporate governance.
4. Identify factors that delimit the activity of financial control in corporate governance.
5. Provide a framework for reviewing the importance of external control as a means of increasing transparency in corporate governance, with pragmatic reporting.

4.1. Analysis of multiple regressions

4.1.1. Multiple regression equation (Mixed Linear Model)

The model of statistical analysis was the Mixed Linear Model (LMM), where the number of variables was limited to have a considerable effect interpretation. For the analysis and presentation of results, the statistical analysis software IBM SPSS Statistics 20 was used. We used this model with the objective of statistical inference among the independent variables:

- NON-EXISTENT RECOMMENDATION;
- RECOMMENDATION BLANK;
- RECOMMENDATION NOT APPLICABLE;
- RECOMMENDATION NOT FILLED;
- PARTIALLY FILLED RECOMMENDATION;
- RECOMMENDATION FILLED.

The previous independent variables had as main dependent variable: RECOMMENDATION VERIFIED WITH MUCH FREQUENCY.
The general expression of the model was as follows:

\[ Y_{ij} = (Y_{10} + Y_{1j} Z + u_{1j}) X_{ij} + e_{ij} = (Y_{10} + Y_{1j} X_{ij} + u_{1j}) + e_{ij} \]  

\[ Y_{ij} = (Y_{10} + Y_{1j} X_{ij} + u_{1j}) + e_{ij} \]  

According to Marôco (2011), this model is mixed because it consists of a fixed and a random component. The fixed component was: \( Y_{10} + Y_{1j} X_{ij} \) and the random component was: \( u_{1j} + e_{ij} \).

The model is of a multilevel nature (level 1 and level 2 variables in the same model) and the nature of the moderation between \( Z \) and \( X \) (cross-interaction between variables of different levels). The model was generalized to several independent qualitative variables, called 'factors' (random or fixed). In this investigation, the qualitative variables and framed as 'factors' were as follows:

- NON-EXISTENT RECOMMENDATION;
- RECOMMENDATION BLANK;
- RECOMMENDATION NOT APPLICABLE;
- RECOMMENDATION NOT FULLFILLED;
- PARTIALLY FULLFILLED RECOMMENDATION.

The quantitative variable called 'covariable' (always fixed), was as follows: RECOMMENDATION FULLFILLED.

The main dependent variable (RECOMMENDATION VERIFIED WITH MUCH FREQUENCY) is considered in this quantitative model. The model shows the relationship between the error associated with the effect of the 2nd order factor \((Z)\) and the independent variable.

\[ Y_{ij} = Y_{10} + Y_{1j} X_{ij} + u_{1j} + e_{ij} \]  

\[ Y_{ij} = Y_{10} + Y_{1j} X_{ij} + u_{1j} + e_{ij} \]  

4.1.2. Estimation of parameters and model tests

In the estimation of the parameters of the model, the two main I. functions used in Mixed Linear Models (Marôco, 2011) were used. As for the author, consider for large samples, as is the case of the investigation (17,015 observations in the independent variables, and 3,276 observations in the dependent variables, during the period from 2007 to 2011), the two methods produce similar estimates. Thus, the expression with the respective variables:

\[ Y_{ij} = Y_{10} + Y_{1j} X_{ij} + u_{1j} + e_{ij} \]  

\[ Y_{ij} = Y_{10} + Y_{1j} X_{ij} + u_{1j} + e_{ij} \]  

Table 1. Model dimension*
In the reading of outputs (Marôco, 2011), the model dimension in Table 1 presents the fixed, random effects and structures of variance-covariance matrices of random effects and model residuals. In the investigation we verified three fixed effects and two random effects. Table 2 the value of the -2 LLREML function, and the values of AIC, AICC, CAIC and BIC. These values fall within the observed parameters, without a significant disparity.

Table 2. Information criteria

<table>
<thead>
<tr>
<th>Source</th>
<th>Numerator df</th>
<th>Denominator df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1</td>
<td>4,035</td>
<td>35,059</td>
<td>.004</td>
</tr>
</tbody>
</table>

Table 3. Type III of fixed effects

<table>
<thead>
<tr>
<th>Source</th>
<th>Numerator df</th>
<th>Denominator df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
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<td>1</td>
<td>4,035</td>
<td>35,059</td>
<td>.004</td>
</tr>
</tbody>
</table>

Table 4. Estimates of fixed effects

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Estimate</th>
<th>Std. Error</th>
<th>df</th>
<th>t</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residual</td>
<td>12,454,585</td>
<td>2,919,019</td>
<td>4,035</td>
<td>5,921</td>
<td>.004</td>
<td>34,352,608 to 40,020,504</td>
</tr>
</tbody>
</table>

Table 5. Covariance parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Estimate</th>
<th>Std. Error</th>
<th>Wald Z</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residual</td>
<td>12,454,585</td>
<td>2,919,019</td>
<td>4,035</td>
<td>5,921</td>
<td>.004</td>
</tr>
</tbody>
</table>

Following the previous reading, the Table 3 indicates the test to the significance of the intercept or the degree of the auditors verifying the recommendation met very often.

The hypotheses under test are H₀: Y = 0 vs. H₁: Y > 0. Being R₁,4035 = 35,059, p < 0,05 rejects H₀ and it is concluded that the degree of the auditors verifying the recommendation fulfilled very frequently is significantly different from zero.

The estimate of this average is given in the “estimate” column, α(Ŷ₁) = 17,179081. If t(4,035) = 5,921, p < 0,05, we can conclude that this estimate is significantly different from zero.

In the Table 5 “Covariance Parameters” the estimates of the variances of the random terms (σ²Uj) (line “Intercept”) and the residuals of each recommendation (σ²ε) (“Residual” row), are shown. The estimate of the variances of the residues is σ²ε = 12,454,585. As Zwald = 4,266, p < 0,05, we can reject H₀: σ²ε = 0 and conclude that the residual variance is significantly higher than 0.

The random variables (RECOMMENDATION BLANK and NON-EXISTENT RECOMMENDATION) were considered as redundant, because their ratings are associated with recommendations that were not in the codes of commercial companies, or that did not exist in 2007 and 2008, as mentioned in the excerpt from the table of measurement of compliance with each recommendation with the following scale.

4.1.3. Multinomial logistic regression equation

In addition to the Linear Mixed Model (MLM), we used the multinomial logistic regression model to corroborate the dissertation and verify the probability of observing compliance with the 2010 Corporate Governance recommendations, according to the external auditors’ survey.

In the model, both the main independent variable (RECOMMENDATION FULLFILLED) and the dependent variable (RECOMMENDATION VERIFIED WITH MUCH FREQUENCY) are qualitative. In this model, the dependent variable was poly-nomic nominal.

The multinomial logistic regression model, based on the Nominal Regression· Model Dimension table, was the following:

\[
\text{RECOMMENDATION VERIFIED WITH MUCH FREQUENCY = } \beta_0 + \beta_r \text{ RECOMMENDATION FULLFILLED (j = 1, ..., n)}
\] (6)

To obtain elucidating results, the logistic regression model (Marôco, 2011, p. 810) was:

\[
\text{Logit}(\hat{\theta}) = \beta_0 + \beta_r X_j; \quad (j = 1, ..., n)
\] (7)

In this model, \(\beta_r\) is the value of \(\ln(\theta/1 - \theta)\), when all \(X_j = 0\), \( (i = 1, ..., p) \) and \(\beta_r, \beta_2, ..., \beta_p\) are Logit coefficients, i.e., the variation of Logit(\(\hat{\theta}\)) such that \(AX = 1\). The dependent variable is not Y, or P[Y = 1], but Logit(\(\hat{\theta}\)).

The regression model followed the following assumptions:
1. Linearity and additivity: the Logit scale ($\pi$) is additive and linear (but not $\pi$).

2. Proportionality: the contribution of each $X_i$ ($i = 1, \ldots, p$) is proportional to its value with a factor $\beta_i$.

3. Effect constancy: the contribution of an independent variable is constant, and independent of the contribution of the other independent variables.

4. The errors are independent and have a normal distribution.

5. The predictors are not multicoline (similar to multiple linear regression).

5. DISCUSSION AND CONCLUSION

Future studies can use probabilistic sampling, which could be more extensive in the reporting population, with a survey of 87.76% of the external auditors. Future studies should consider, as much as possible, a maximum approximation of the characteristics of the target population.

Accordingly, the results of the investigation indicate that a significant direct relationship is established between the compliance of the commercial companies with the recommendations of the external auditors and 84.234% of the recommendations. In the presence of high levels of corruption, these values might not be what was expected, and therefore, the receptivity and ethics in the adoption of recommendations by commercial companies was crucial to the results obtained. However, when analyzing the data with the applications of the multiple regression model, it was observed that in 2007 and 2008 there was a process of adaptation to the recommendations of the society’s government. As such, following the statistical observations, we conclude that the Hypothesis I is directly significant. Thus, we confirm that a greater intervention of the external financial controller in compliance with the CMVM recommendations in corporate governance allows for greater transparency of information and reduction of agency, fraud and economic crimes.

In general, the results are consistent with the studies on the efficiency of internal control procedures in manager remuneration and the quality of financial statement information (Keasey, 1999). There is a positive correlation between compliance and some recommendations of the CMVM and the abnormal returns of companies listed on the Lisbon and Porto Stock Exchange, the ROC/SROC contributed to the transparency of corporate governance information.

In the limitations to the work of the ROC/SROC, it is plausible to say that in the transparency of the information, the activity of the ROC/SROC is limited to the materiality of the information, capacity of monitoring of the risks, analysis of the systems of internal control and effective time to be audited in the presence of commercial companies. In this sense, the limitation to the quality of information in the aggregation of functions in the social organs propititates the conflicts of agency, fraud and economic crime.

This article made the following contributions:

- two methodological approaches in data analysis, based on the mixed linear model, and the multinomial logistic regression model between the main independent and dependent variable;
- results obtained that contribute to clarify the information transparency mechanisms of NYSE Euronext Lisbon companies;
- understand the relationship between the constructs, government of listed companies’ → external auditor → information transparency;
- empirical evidence on the action of the external auditor regarding the verification of corporate governance recommendations in the transparency of information.

In short, in the application of current legislation, we find that the various regulations of the CMVM, OROC, European Commission, among others, point out that the ROC/SROC must verify the conformity between the annual management report, annual accounts and the elements of the Report on Corporate Governance. Although the Commercial Companies Code does not assign a clear legal requirement to the ROC in verifying compliance with Corporate Governance recommendations, we believe that it should do so, as it allows for a more transparent and reliable legal certification of accounts.
### APPENDIX

#### Table 6. Classification of compliance with the recommendations of company governance code of 2010 (CMVM)

<table>
<thead>
<tr>
<th>Classification</th>
<th>Meaning of the Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fulfilled</td>
<td>It is a recommendation that is fulfilled in full by society.</td>
</tr>
<tr>
<td>Partially fulfilled</td>
<td>It is a recommendation that does not fully comply with recommended practice.</td>
</tr>
<tr>
<td>Not fulfilled</td>
<td>It is a recommendation that society does not comply with, and may or may not be being replaced by another government practice.</td>
</tr>
<tr>
<td>Not applicable</td>
<td>It is a recommendation that was analyzed by the company, but that by the corporate model and other reasons of organization and management, it is not applicable to the company, and can be fulfilled or not.</td>
</tr>
<tr>
<td>Recommendation blank</td>
<td>It is a recommendation that was presented in the model at the date of the recommendations of the company's governance practices, but that is without written answer.</td>
</tr>
<tr>
<td>Non-existent recommendation</td>
<td>It is a recommendation that was not presented in the model at the date of the recommendations of the governance practices of the company by the regulator of the Portuguese stock market, CMVM, and / or that the company does not mention.</td>
</tr>
</tbody>
</table>

#### Table 7. All external auditors of the commercial companies operating on the NYSE Euronext Lisbon, which were audited at least once by one of the four reference auditors to work in the Portuguese territory

<table>
<thead>
<tr>
<th>Commercial companies to operate on the market NYSE Euronext Lisbon</th>
<th>EXTERNAL AUDITORS</th>
<th>Years of practice</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>Designation</td>
<td>2007</td>
</tr>
<tr>
<td>1</td>
<td>Altiri, SGPS, S.A.</td>
<td>DHS</td>
</tr>
<tr>
<td>2</td>
<td>Banco Comercial Português, S.A.</td>
<td>KMPG</td>
</tr>
<tr>
<td>3</td>
<td>Banco Espírito Santo, S.A.</td>
<td>KMPG</td>
</tr>
<tr>
<td>4</td>
<td>Banif SGPS, SA</td>
<td>EY</td>
</tr>
<tr>
<td>5</td>
<td>Banco Popular Português, S.A.</td>
<td>PWC</td>
</tr>
<tr>
<td>6</td>
<td>Banco BPI</td>
<td>DHS</td>
</tr>
<tr>
<td>7</td>
<td>Brisa - Auto-Estradas de Portugal S.A.</td>
<td>ALV</td>
</tr>
<tr>
<td>8</td>
<td>Toyota Caetano Portugal, S.A.</td>
<td>DHS</td>
</tr>
<tr>
<td>9</td>
<td>Colna, SGPS, S.A.</td>
<td>DHS</td>
</tr>
<tr>
<td>10</td>
<td>Correia Amorim, SGPS, S.A.</td>
<td>PWC</td>
</tr>
<tr>
<td>11</td>
<td>CIMPOR - Cimenteros de Portugal, SGPS, S.A.</td>
<td>DHS</td>
</tr>
<tr>
<td>12</td>
<td>EDP - Energias de Portugal, S.A.</td>
<td>KMPG</td>
</tr>
<tr>
<td>13</td>
<td>EDP Renováveis, S.A.</td>
<td>KMPG</td>
</tr>
<tr>
<td>14</td>
<td>F. Ramada Investimentos, SGPS, S.A.</td>
<td>DHS</td>
</tr>
<tr>
<td>15</td>
<td>Futebol Clube do Porto - Futebol, S.A.D.</td>
<td>DHS</td>
</tr>
<tr>
<td>16</td>
<td>Fisipe-Fibras Sintéticas de Portugal, S.A.</td>
<td>DHS</td>
</tr>
<tr>
<td>17</td>
<td>FINIBANCO HOLDING, SGPS, S.A.</td>
<td>EY</td>
</tr>
<tr>
<td>18</td>
<td>Galp Energia, SGPS, S.A.</td>
<td>DHS</td>
</tr>
<tr>
<td>19</td>
<td>IBERSEL, SGPS, S.A.</td>
<td>PWC</td>
</tr>
<tr>
<td>20</td>
<td>Inapa - Investimentos, Participações e Gestão, S.A.</td>
<td>PWC</td>
</tr>
<tr>
<td>21</td>
<td>Impresa - Sociedade Gestora de Participações Sociais, S.A.</td>
<td>DHS</td>
</tr>
<tr>
<td>22</td>
<td>Jeronimo Martins, SGPS, S.A.</td>
<td>PWC</td>
</tr>
<tr>
<td>23</td>
<td>Lisgráfica - Impressão E Artes Gráficas, S.A.</td>
<td>DHS</td>
</tr>
<tr>
<td>24</td>
<td>Martinher, SfP S.A.</td>
<td>AAM</td>
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<td>25</td>
<td>Mota-Engil, SGPS, S.A.</td>
<td>DHS</td>
</tr>
<tr>
<td>26</td>
<td>Grupo Media Capital, SGPS, S.A.</td>
<td>DHS</td>
</tr>
<tr>
<td>27</td>
<td>Novaíssae, SGPS, S.A.</td>
<td>PWC</td>
</tr>
<tr>
<td>28</td>
<td>Sociedade Comercial Drey Antunes, S.A.</td>
<td>EY</td>
</tr>
<tr>
<td>29</td>
<td>Papeles y Cartones de Europa, S.A. (EUROPAC)</td>
<td>NEF</td>
</tr>
<tr>
<td>30</td>
<td>Portucel-Empresa Productora de Pasta de Papel, S.A.</td>
<td>PWC</td>
</tr>
<tr>
<td>31</td>
<td>REN - Redes Energéticas Nacionales, SGPs, S.A.</td>
<td>PWC</td>
</tr>
<tr>
<td>32</td>
<td>Banco Santander Totta, S.A.</td>
<td>ALV</td>
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<tr>
<td>33</td>
<td>SPORTING - Sociedade Desportiva de Futebol, SAD</td>
<td>BDO</td>
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<tr>
<td>34</td>
<td>Sempasa - Sociedade de Investimento e Gestão, SGps, S.A.</td>
<td>PWC</td>
</tr>
<tr>
<td>35</td>
<td>Sport Lisboa e Benfica Futebol SAD</td>
<td>KMPG</td>
</tr>
<tr>
<td>36</td>
<td>Sonias, SGPS, S.A.</td>
<td>DHS</td>
</tr>
<tr>
<td>37</td>
<td>Sonae Indústria, SGPS, S.A.</td>
<td>PWC</td>
</tr>
<tr>
<td>38</td>
<td>Sumol+Compal, S.A.</td>
<td>ORA</td>
</tr>
<tr>
<td>39</td>
<td>SAG GEST - Soluções Automovel Globais, SGPS, S.A.</td>
<td>EY</td>
</tr>
<tr>
<td>40</td>
<td>Teixeira Duarte - Engenharia e Construções, S.A.</td>
<td>MAR</td>
</tr>
<tr>
<td>41</td>
<td>VAA Vista Afriga Atlantic, SGPS, S.A.</td>
<td>EY</td>
</tr>
</tbody>
</table>

Note: * The company EUROPAC - Papeles y Cartones de Europa, S.A is a Spanish limited liability company, but active in the NYSE Euronext Lisbon market (including 2007 to 2011). Its external auditor is Ernst & Young, SL, with professional address at the Torre Picasso, Plaza Pablo Ruiz Picasso, 1, 28020 Madrid; tel: 902 383 400; http://www.ey.com/es/ES/ approporativo%202011.pdf [17 de novembro de 2012]
Table 8. Supplementary table of the sample identification of financial audit investigation

<table>
<thead>
<tr>
<th>N</th>
<th>IDEM</th>
<th>Name of the company of official auditors</th>
<th>No. of companies responsible for auditing</th>
<th>Freq.</th>
<th>Per. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DHS</td>
<td>Deloitte &amp; Associados, SROC, S.A.</td>
<td>13</td>
<td>0,2653</td>
<td>26,53%</td>
</tr>
<tr>
<td>2</td>
<td>EY</td>
<td>Ernst &amp; Young Audit &amp; Associados, SROC, S.A.</td>
<td>5</td>
<td>0,1020</td>
<td>10,20%</td>
</tr>
<tr>
<td>3</td>
<td>KPMG</td>
<td>KPMG &amp; Associados, SROC, S.A.</td>
<td>7</td>
<td>0,1429</td>
<td>14,29%</td>
</tr>
<tr>
<td>4</td>
<td>PWC</td>
<td>PricewaterhouseCoopers &amp; Associados, S.R.O.C, LDA</td>
<td>13</td>
<td>0,2653</td>
<td>26,53%</td>
</tr>
<tr>
<td>5</td>
<td>BDO</td>
<td>BDO &amp; ASSOCIADOS, Sociedade de Revisores Oficiais de Contas, LDA</td>
<td>3</td>
<td>0,0612</td>
<td>6,12%</td>
</tr>
<tr>
<td>6</td>
<td>PAT</td>
<td>Patricio, Moreira, Valente &amp; Associados, SROC</td>
<td>1</td>
<td>0,0204</td>
<td>2,04%</td>
</tr>
<tr>
<td>7</td>
<td>AUR</td>
<td>AUREN Auditores &amp; Associados, SROC, S.A.</td>
<td>1</td>
<td>0,0204</td>
<td>2,04%</td>
</tr>
</tbody>
</table>

Subtotal (Other auditors in 2011) 43 0,8776 87,76%

Subtotal (Companies operating in the market in 2011 grouped in a parent business group) 49 1,0800 100,00%

Total 57

Table 9. Table of quantitative data of statistical analysis

<table>
<thead>
<tr>
<th>Period from 2007 to 2011</th>
<th>I. General Assembly</th>
<th>II. Board of Directors</th>
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<tr>
<td></td>
<td>vii</td>
<td>viii</td>
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<tr>
<td>Non-Existing Recommendation</td>
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<tr>
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<td>0</td>
</tr>
<tr>
<td>Recommendation Not Fulfilled</td>
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<td>5</td>
</tr>
<tr>
<td>Partially Recommendation Fulfilled</td>
<td>0</td>
<td>4</td>
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<td>Recommendation Fulfilled</td>
<td>164</td>
<td>135</td>
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<tr>
<td>Recommendation With Much Frequency</td>
<td>18</td>
<td>18</td>
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</table>
## Period from 2007 to 2011

### II. Organ of Administration and Inspection

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### Corporate Governance - SROC Questionnaires

1. **Risk Governance and Control: Financial Markets & Institutions**

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### Independent Variables

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### Dependent Variables

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REFERENCES


