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Do auditors make mistakes when they write audit reports? An empirical study applied to Spanish non-listed firms

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The objective of this paper is to analyse whether auditors comply with the standards currently in force when writing audit reports in Spain. We try to obtain evidence for the relationship of the errors contained in the report with the type of opinion figuring in it, and with the auditor issuing it. This study is based on a sample of 1236 reports selected by the stratified random sampling method, for the period 2004–2007. Once we had defined the dependent variable, the number of errors committed in the report, the independent variables, the type of auditor and type of opinion, we tested the hypotheses by means of a regression analysis with the aim of estimating the average number of errors that can be found in a report according to the variables described. The results obtained permit us to conclude that reports with a qualified opinion contain a greater number of errors, and that they are committed to a greater extent by individual auditors than by companies and by multinationals.

Keywords: audit quality; auditor errors; opinion of reports; types of auditor

JEL classification: M42

1. Introduction

As affirmed by Kluger and Shields (1989), the quality of the accounting information contained in financial statements depends, among other factors, on the techniques used by the auditor to evaluate the relevance and reliability of the firm's accounting information. The summary of the work carried out by the auditor takes the form of the audit report, so this is a document of vital importance, being the medium of communication between the auditor and the users, both external and internal, and must be free of errors and, as the Technical Audit Standards¹ indicate, as clear as possible.

Given the influence of audit reports over decision-making for the different users of information, our paper attempts to show the importance of erroneously issuing a report with mistakes, hence auditing regulators must take measures to correct this problem, in order to improve the quality of reports.

In Spain, there exist studies that analyse the quality of auditing through variables such as the independence of the auditor, audit committees, problems associated with performance of multiple services or with training needs, but we have not found papers focused on measuring the quality of the audit report through analysis of any errors that

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might be contained in it. The objective of this research paper is to make known the different types of errors contained in audit reports on annual accounts, by quantifying them and relating them with the type of opinion given in the report and with the auditor who issues it. This was done by analysing a representative sample of audit reports of annual accounts between 2004 and 2007, formulating a set of hypotheses that try to respond to the objective set by means of multivariate regression models.

This paper is structured into six sections. After this introduction, in the second section we review the literature. In the third, we suggest the hypothesis. In the fourth section, we describe the sample to be studied, define the variables and the methodology used in the empirical study. In the fifth, we detail the results obtained, finalising in the sixth with the conclusions drawn from our study.

2. Literature review. Errors in audit reports

The main objective of auditors is to create trust between firms and their stakeholders (Libby, 1979). Several researchers state that the auditor's role is to increase the trust in the information presented through the audit report (Bhattacharjee, Moreno, & Yardley, 2005; Dunn, 1996). However, there exist differences between users' expectations of the information they are to receive and what the auditors in fact communicate (Brown, Hatherly, & Innes, 1997; Duréndez, 2003; Humphrey, Moizer, & Turley, 1992; King, 1999). Therefore, the audit report is an essential medium for improving communication between auditors and the users of the information (Humphrey et al., 1992). Authors such as Hayes, Dassen, Schilder, and Wallage (2005, p. 51) affirm that 'functional audit quality is defined as the degree to which the process of carrying out the audit and communicating its results meets a customer's expectations'.

The content of the audit report is important because the message that the auditors try to communicate through it could be misinterpreted (Bailey, Bylinski, & Shields, 1983; Bamber & Stratton, 1997; Libby, 1979). Hence, the form and the content of the audit report has been criticised by various authors (Bamber & Stratton, 1997; Brown et al., 1997; Citron & Taffler, 2004; Holt & Moizer, 1990; Humphrey et al., 1992; King, 1999; Libby, 1979). Other authors refer to the utility of the audit report (Bamber & Stratton, 1997; Dopuch, Holthausen, & Leftwich, 1986; Duréndez, 2003; Pringle, Crum, & Swetz, 1990).

All the member states of the European Union have legislation that specifies both the form and the content of audit reports, which are thus standardised and permit detection of whether or not reports are written out in accordance with established auditing standards (Hayes et al., 2005; Spathis, Doumpos, & Zopounidis, 2003). The literature has provided evidence of the existence of errors when writing out audit reports of annual accounts in accordance with the stipulations in the audit standards in force in their countries and which make reference to the degree of compliance with these standards on the part of the auditors, relating to errors both of format and of content of the reports (see Table 1).

3. Hypotheses

3.1. Arguments about the influence of the opinion in audit reports

Spain, like other countries of the European Union, has a corporate law that specifies what should be the format and content of audit reports. According to Spanish law, the

206 *M. Mareque* et al.

Country	Author	Objective	Methodology and sample	Results
SPAIN	López- Corrales (1997)	To assess whether audit professionals comply with the standards in force when writing out their reports, analysing different error.	Analysis of 1,384 reports from the Spanish Region of Galicia, corresponding to the years 1990– 1993, studying the degree of correctness or incorrectness in the wording of the reports.	Introductory and scope paragraph: not making reference to limitations of scope. Comparability paragraph: Omission of obligatory information. Explanatory paragraphs of qualified opinion: lack of quantification of qualifications, confusion among the different types of qualifications. Emphasis of matter paragraphs: their utility. Opinion paragraph: including two opinions
	López et al. (1997)	To assess auditors' opinions of the accounting information drawn up by this collective through the audit report.	Analysis of the content of 335 Spanish reports corresponding to unlisted firms in the Region of Asturias in 1994.	Incorrect treatment of changes in accounting principles and standards in the qualifications and opinion paragraphs. Incorrect treatment of certain reservations such as uncertainty
	Cabal and Robles (1998)	To assess auditors' opinions of the information published by entities listed on the Stock Exchange.	Study of the types of opinion issued in the reports, and analysis of the reasons for the qualified opinions of 319 audit reports from 241 firms, listed on the Madrid Stock Exchange in 1995.	Different treatment for identical situations appearing in the emphasis and qualifications paragraphs. The management report paragraph is missing or incorrectly written.

Table 1. Some studies mentioning errors committed in reports.

(Continued)

Country	Author	Objective	Methodology and sample	Results
	Mareque (2010)	To identify errors commented on by auditors when writing the reports according to the provisions of the Technical Audit Standards for reports.	Analysis of 1236 Spanish reports on unlisted firms of the Galicia Region, corresponding to the years 2004– 2007, studying the errors committed in the reports in terms of the type of auditor issuing them and of the opinion they contain.	The reports contain errors, and are classified as insignificant, significant and highly significant. The most numerous errors appear in the reports with qualified opinion (qualified, disclaimer and adverse), mostly issued by auditors working individually.
SWEDEN	Kier and Lavesson (2010)	To explain the content of audit reports and to define similarities and differences among audit reports in Swedish listed companies.	The analysis is based on data collected from 757 audit reports on Swedish listed companies (98.57% of the total population) between 2006 and 2008.	The study shows that several reports deviate from the Swedish audit standards in terms of both form and content. Only a few reports contain extra information, not required by the Swedish Generally Accepted Audit Standards (GAAS). The audit reports mainly deviate from the audit standards in terms of length, audit firm used, audited company size and branch.
BOSNIA & HERZEGOVINA	Šapina and Ibrahimagić (2011)	To identify errors in published audit reports carried out by some independent auditors from Bosnia and Herzegovina. They also carried out analysis of the causes of the identified errors.	48 samples of auditor positions were gathered, and analysed from the point of view of their compliance with ISA, 700 and ISA, 701.	There are a number of deviations from ISA 700 and 701, from the formal text content aspect as well as the essence aspect, taking into consideration both commercial auditors and government auditors in Bosnia & Herzegovina.

Table 1	l. (C	Contin	ued).
	· · ·		

wording and content of the audit report is not free. The audit report must have a minimum content referred to in accordance with articles 51 of Directive 78/660/EEC, on the annual accounts of certain types of companies, and 37.2 of the VII Directive 78/660/ EEC, to the consolidated financial statements in order to promote the comparability in the international economic environment.

The audit report model in Spain is regulated in Article 3 of the Law on Audit of Accounts. The Spanish Institute of Accountancy and Audit of Accounts (ICAC) includes standard reports that auditors should use in their Technical Audit Standards. The format and content of the audit report is covered in Section 3 of the Technical Audit Standards.²

The opinions that can be included in an audit report are clean opinion (unqualified opinion) and unclean opinion (qualified opinion). The unclean opinion includes: unqualified opinion, disclaimer opinion and adverse opinion. A report with unclean opinion is more extensive, it contains a greater number of paragraphs which describe the reservations (breach of accounting principles, omissions of information, scope limitations, ...). Consequently, an audit report with an unclean opinion is a longer report, more technical, with a greater amount of information.

When an auditor issues an unclean opinion it should include one or more explanatory paragraphs, in which the auditor should clearly describe the nature and reasons for the reservations and should quantify the effect of the reservations on the annual accounts. Furthermore, Spanish law specifies the format and content that these explanatory paragraphs should have. Therefore, these characteristics can result in there being a higher probability of the auditor making mistakes when writing a report with an unclean opinion. These errors are studied by several authors. In Bosnia and Herzegovina, Šapina and Ibrahimagić (2011) classify errors as errors of a 'formal nature' (the subject of the audit incompletely or incorrectly defined, the responsibility of the Bureau for financial reports incompletely or incorrectly defined, incorrectly stipulated auditing standards, incomplete description of audit process) and errors of a 'substance nature' (auditor inserts his own remarks into 'notes on the financial statements', misunderstanding of the limitations of the audit scope, missing quantitative description of financial consequences caused by spotted irregularities, emphasising the facts that are not to be emphasised). In Sweden, Kier and Lavesson (2010) classify the errors as: 'form errors' and 'content errors'. The study contains two dependent variables called total form (measured as a sum of the scores from eight different variables) and total content (measured as a sum of the scores from 16 different variables).

In Spain, several authors (Alcarria, 1997; Cabal, 2001; Cabal & Robles, 1998; López-Corrales, 1997, 1998; López, Martínez, & García, 1997; Gutiérrez, 2009; Hernández & Vidal, 1998) observe that the auditors make more errors in reports with unclean opinion. In general, they observe: incorrect handling of accounting principles and methods, incorrect treatment of situations because of uncertainty, a failure to include the omission of information detected in the annual accounts of the audited company, a failure to correctly record going concern situations or tax contingencies in explanatory paragraphs, a failure to reflect the scope limitations under current regulations, errors in the wording of explanatory paragraphs (no quantification, insufficient information, complicated and user-unfriendly language), confusion between different types of qualifications (reservations).

In relation to the opinion paragraph, partial reports or reports that contain two opinions (circumstances expressly prohibited under Spanish law) have been detected, as well as a failure to include circumstances from explanatory paragraphs in the opinion. This leads to our first hypothesis in null terms: **Hypothesis 1:** The type of opinion does not influence the errors committed in the audit report.

3.2. Arguments about the type of auditor and its relationship to audit report quality

As affirmed by Duréndez and Sánchez (2008) the auditor can be considered responsible for the report; as in previous literature the size of the auditing firm has been observed to be a subrogate for the quality of the audit (Carcello & Nagy, 2004; Colbert & Murray, 1998; Cravens, Flagg, & Glover, 1994; De Angelo, 1981; Fargher, Taylor, & Simon, 2001; Kane & Velury, 2004; Moizer, 1997; Nair & Rittenberg, 1987; Palmrose, 1988; Piot, 2001; Sainty, Taylor, & Williams, 2002; Whisenant, Sankaraguruswamy, & Raghunandan, 2003). Feroz, Park, and Pastena (1991) state that the size of the auditor is a good subrogate for measuring the quality of the audit, as small American audit firms receive higher penalties than the large audit firms from the Securities and Exchange Commission (SEC) for deficiencies committed.

The image that users have of auditors is different depending on the type of auditor. In Spain, García-Benau, Garrido, Vico, Moizer, and Humphrey (1999) analyse audit service quality, in order to verify users' image of auditors, reaching the conclusion that there are significant differences between their image of the big audit multinationals and the rest. In the Czech Republic, Sucher, Moizer, and Zarova (1999) observed that audited firms perceive a different image of the audit multinationals from that of the rest of the small local auditors, and associate it with a better quality of audit when it is carried out by the big firms.

The reputation of the multinational firms is different from that of the small and medium firms and individual auditors: in general the multinationals have a better reputation, as found by Francis and Yu (2009), Francis and Wilson (1988), Khrisnan and Khrisnan (1996), Rollins and Bremser (1997), Sundgren (1998), Sucher et al. (1999) and, Ferguson and Stokes (2002). On the other hand, Lawrence, Minutti-Meza, and Zhang (2011) set out arguments to the effect that the 'Big Four' and the rest of the audit firms must provide comparable levels of audit quality, since both types of auditors perform their work to the same standards and should therefore deliver a reasonable level of quality. Furthermore, 'the "Non-Big-Four" have better knowledge of local markets and a better relationship with their clients' (Louis, 2005), permitting the 'Non-Big-Four' to better detect irregularities.

In Sweden, Kier and Lavesson (2010) made a study of the analysis of compliance with audit standards in relation to their format and content for a sample of audit reports, trying to test, among other hypotheses, whether firms listed on the Stock Exchange and audited by one of the Big Four issue audit reports that are more correct in form and content. The results regarding the impact of the audit firm indicate that there is a negative relationship between the use of a Big 4 firm and the correctness of the audit report.

These studies show that the type of auditor influences the perceived quality of the audit report, and therefore the errors committed by the auditors in writing out their reports. We therefore propose the following hypothesis in null terms:

Hypothesis 2: The type of auditor does not influence the errors committed in the audit report.

4. Empirical study

4.1. Sample

Our first source of information to be able to obtain the audit reports on annual accounts that would form our population were the five Spanish companies' registries located in the Region of Galicia (region located in northern Spain). These registries contributed information on 4100 audit reports on annual accounts between 2004 and 2007.

As our objective was the analysis of the audit reports of four consecutive years (2004 to 2007), we eliminated those firms for which we did not have the reports for all four consecutive years.

The sample was chosen by the stratified random sampling method without replacement, where the strata are the sectors of activity to which the firms of our population belonged, with distribution proportional to the number of firms in the sector. In our case we set the estimation error ε =0.01, and since there were no previous studies determining the value of p_h (proportion of reports of sector *h* that present no errors), for every h =1,2,..., *H*, we considered the most unfavourable case, i.e. p_h =0.5 for every h = 1,2...,*H*. The sample size obtained for each year is n=309 audit reports.

The selected sample was carried out for unlisted companies. The reason for selecting unlisted companies is that the majority of the existing studies of audit reports are made for companies listed on the stock exchanges, and this information is easily accessible and costs the user nothing. In our opinion and in the opinions of others (Carson et al., 2012), studies that analyse the audit reports of small and medium firms³ are needed. Small and medium firms form a very important part of countries' business networks, especially in the case of Spain, where SMEs represent 99.88% of current existing firms (Ministry of Industry, Energy and Tourism, 2012).

We must make it clear that our study contains the limitation that the sample selected is not representative of all the Spanish business fabric; as already indicated it refers only to one Region of Spain, implying that the results obtained cannot be extrapolated to the rest of the country (regions). However, itis important to note that Spain is a diverse country. Spain is known for being a country of regional heterogeneity in terms of institutions and economic activities (Maté, García, & López, 2009). Spain consists of 17 regions, which contain cultural and linguistic (there are four official languages) aspects and clear differentiations among economic sectors. In particular, the north regions of Spain, to which our study refers, are characterised by having greater independence in both government decisions and for regulatory practices. Duréndez and Maté (2012) conducted a study of the Spanish regions with the aim of analysing the role of the spatial factor in the determination of audit quality and the results confirm the existence of a location effect according to which the highest quality values are found in the most developed Spanish areas (the north regions).

Currently, most existing studies in Spain and at an international level refer to samples of companies that are chosen over the total population of a country. However, taking into account existing regional heterogeneity in some countries, we believe it would be worthwhile conducting studies that analyse the different European regions with similar characteristics.

4.2. Variables

An audit report on financial statements is considered wrong when it does not comply with current regulations. In Spain, the reports must meet the standards contained in the Technical Audit Standards for reports issued by the Spanish Institute of Accountancy and Audit of Accounts (ICAC).

To proceed to identify an audit report with errors, we analyse the various elements contained therein. In the analysis we note that there are reports that do not comply with the Audit Technical Standards, and therefore are considered erroneous.

The classification of the errors was done taking into account the importance, value or relevance that the error detected could have for the clarity of the audit report. We classify the dependent variable, *errors committed by the auditors in audit reports*, as:

- Insignificant errors: referring to defects, imperfections or deficiencies detected in the reports that refer to errors of form. Their existence does not imply reduced understanding by the reader or user of the report.
- Significant errors: omission or inadequate presentation of relevant or important information in the audit report. Their existence implies that the reader or user may have difficulties in understanding the report or may lack information considered necessary for decision-making, and so may make incorrect decisions.

The appendix contains a table with the description of the principal errors found in audit reports, classified as insignificant and significant.

Šapina and Ibrahimagić (2011), show the existence of errors in the audit reports of a sample of firms in Bosnia and Herzegovina, classifying them as errors of a formal nature and errors of substance nature. Kier and Lavesson (2010), examine how auditors deviate from the Swedish audit standards when writing out the audit reports of firms on the Stockholm Stock Exchange, classifying these deviations as errors of form and of content.

Initially, the independent variables considered are: type of auditor, type of opinion, firm size, auditor switching, date of report, the professional bodies and industry. In making the correlations between these variables, a problem of multicollinearity between variables has been detected, except among type of auditor and type of opinion. Therefore, the variables considered as independent were the type of auditor and the type of opinion, which we identify below.

4.2.1. Type of auditor

With the aim of specifying whether some auditors have a greater propensity to issue reports with errors, they were classified into three categories:

- Multinational, including both those known as the 'Big 4' (Deloitte, PriceWaterhouseCoopers, KPMG and Ernst & Young) and other multinationals (BDO, Horwath, Moore Stephens, and so on).
- National audit firm, companies that perform their services only in Spain.
- Individual auditor, exercising on a self-employed basis.

This classification is based on the fact that the firms forming our sample are not listed in the securities market, this classification being consistent with the structure of the Spanish audit market, where there exist clear differences in the market share of international and national firms (Duréndez & Sánchez, 2008; García-Benau, Ruiz-Barbadillo, & Vico, 1998).

4.2.2. Type of opinion

The reports were grouped according to two types of opinion:

- Unqualified opinion.
- Qualified opinion, including the opinions; qualified, disclaimer and adverse.

Both the Spanish⁴ and international⁵ standards contemplate four types of opinion to be issued in audit reports: favourable, with qualifications, refused and unfavourable. But from the empirical evidence of the existing literature, (Ahadiat, 2011; Caso, García, López, & Martínez, 2003; Duréndez & Sánchez, 2008; Ruiz-Barbadillo, Gómez, & Carrera, 2006; Xu, Carson, Fargher, & Jiang, 2013; Xu, Jiang, Fargher, & Carson, 2011; Zdolsek & Jagric, 2011), auditors are somewhat reluctant to issue either of these last two opinions, and it can be appreciated that, in general, there is a tendency to classify reports into two major sections, favourable reports and qualified reports, including in the latter qualified, refused and unfavourable reports.

4.3. Methodology

The hypotheses put forward were tested by means of a regression analysis, in order to estimate the mean number of errors that we can find in a report depending on the type of opinion and the type of auditor. As we are trying to describe the relationship between a discrete count variable, *number of errors*, and the independent explanatory variables *type of opinion* and *type of auditor*, the most appropriate analysis is negative binomial regression for the case of insignificant errors and the Poisson regression for significant errors.

Using the Poisson regression model we describe the relationship between a discrete variable associated with a counting process Y and one or more explanatory variables. If the variable Y follows a Poisson distribution of parameter $\lambda > 0$ then $E[Y] = \lambda$ and Var $[Y] = \lambda$. Furthermore, its probability mass function will be given by (see Abraira & Pérez, 1996):

$$P(Y = y) = \frac{e^{-\lambda} \lambda^{y}}{y!} \text{ with } y = 0, 1, 2...$$
(1)

The Poisson regression model that relates the response variable Y and k explanatory variables, can be described as:

$$\ln \lambda = \alpha_0 + \alpha_1 X_1 + \ldots + \alpha_k X_k \text{ with } E[Y] = \lambda$$
(2)

We will use the likelihood ratio test to measure the goodness of fit of the model,⁶ accepting that the model fits the observations if the critical level of the test is lower than the level of significance set (0.05). To measure the influence of each of the explanatory variables on the response variable we will use the Wald test.

Since the expected value and the variance of a Poisson-distributed random variable coincide, we have to verify if this hypothesis is true. If it is not, the relationship between the count variable Y and the explanatory variable can be modelled by means of a negative binomial regression. In this case $E[Y] = \lambda$ and we will assume that $Var[Y] = \lambda + \delta\lambda^2$. The case of the Poisson regression corresponds to the value $\delta = 0$. To choose between the two regression models, we will use the Lagrange multiplier test (see Cameron & Trivedi, 1998). If we obtain an insignificant value from this test, the Poisson model (δ =0), will be preferable over the negative binomial regression model.

5. Analysis of results

5.1. Testing of hypotheses

We are going to present the results obtained in the empirical study by means of regression analysis (negative binomial and Poisson), but first we must check that a variable that follows a Poisson distribution has the characteristic that its mean and variance coincide. For the variable *number of significant errors* this characteristic is fulfilled, but the same does not occur with the variable *number of insignificant errors*. Hence, we sought another alternative to the Poisson regression model for the relationship between the count variable Y (number of insignificant errors) and the explanatory variables (type of opinion and type of auditor), by means of the negative binomial regression model. We used the Lagrange multiplier test, whose null hypothesis affirms that the appropriate model is a Poisson regression; the alternative hypothesis affirms that it is a negative binomial regression, which is a test to justify the choice between the two models.

In Tables 2 and 3, we summarise the results obtained from the tests for each of the variables *insignificant errors* and *significant errors*. Table 2 shows that the value of the Lagrange multiplier test is significant and therefore we prefer the negative binomial regression model over that of the Poisson model. On the other hand, Table 3 shows the opposite, the value of the said test being insignificant, so we prefer the Poisson regression model.

5.2. Regression models: negative binomial and Poisson

We considered a negative binomial regression model and a Poisson regression model, with the aim of estimating the average number of insignificant errors for the former and the number of significant errors for the latter, that we can find in an audit report as a function of the type of opinion and of the type of auditor. The general equation on the basis of the coefficients of the model would be of the form:

$$\ln (E[Y]) = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \alpha_3 X_3$$
(3)

And the general expression that will allow us to estimate the mean number of insignificant and significant errors per report as a function of the type of auditor and of the type of opinion is given by:

$$E[Y] = e^{\alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \alpha_3 X_3}$$
(4)

where X_1 corresponds to the factor *type of opinion*, X_2 and X_3 correspond to the factor *type of auditor*, the codification of which is shown as follows:

	X_1 1
	0
<i>X</i> ₂	X3
1	0
0	1
0	0
	$\begin{array}{c}X_2\\1\\0\\0\end{array}$

(5)

The reference level for the type of opinion is the 'qualified' opinion and for the type of auditor it is 'individual auditor'.

We performed a robust estimation of the parameters of the model, and the goodness of fit was tested by means of the Omnibus test. The values of the test for each of the years in Tables 4 and 5 show that the model is adequate, as in all the years the critical level (p) is lower than the level of significance (0.05), rejecting the null hypothesis.⁷ This implies that the model adequately describes the relationship between the variables described, according to the observations.

214 *M. Mareque* et al.

	2004	2005	2006	2007
χ^2 Lagrange multiplier (d.f.)	131.192 (1 d.f.)	125.753 (1 d.f.)	119.845 (1 d.f.)	123.330 (1 d.f.)
Critical level Lagrange (0.05)	0.000	0.000	0.000	0.000

Table 2. Contrast of Lagrange multipliers: insignificant errors.

Note: (d.f.): Degrees of freedom.

Source: Authors' estimation.

Table 3	Contrast c	of Lagrange	multipliers:	significant	errors
Table 5.	Contrast C	n Lagrange	muniphers.	Significant	chions.

	2004	2005	2006	2007
χ^2 Lagrange multiplier (d.f.)	1.088 (1 d.f.)	1.319 (1 d.f.)	2.156 (1 d.f.)	3.688 (1 d.f.)
Critical level Lagrange (0.05)	0.297	0.251	0.142	0.055

Note: (d.f.): Degrees of freedom.

Source: Authors' estimation.

Furthermore, for each of Tables 4 and 5 we can appreciate the following.

- The first column includes the estimations of the parameters α_0 , α_1 , α_2 and α_3 , which we can see have a negative sign, indicating that when we pass from the qualified opinion to the favourable and from the individual auditor to the companies or to the multinationals, the mean number of insignificant errors and of significant errors found in a report decreases.
- In the second column, we find the estimation of the variation experienced by the mean number of insignificant errors and of significant errors per report according to the type of opinion and the type of auditor.
- Finally, the third column contains the critical level associated with each test. The hypotheses to be tested are: H_0 : $\alpha_1=0$ as against H_1 : $\alpha_1\neq 0$; H_0 : $\alpha_2=0$ as against H_1 : $\alpha_2\neq 0$; H_0 : $\alpha_3=0$ as against H_1 : $\alpha_3\neq 0$. If the critical level of the test p<0.05 we reject the null hypothesis. which permits us to study whether the parameters are significantly different from zero, i.e. whether there are statistically significant differences between the types of auditor and the types of opinion. On the one hand, therefore, we can observe that these parameters are significantly different from zero (see Table 4) in all the years. On the other hand, we can assign zero to the value of the coefficient associated to the companies in the year 2005 (p=0.156), indicating that there are no differences between companies and individual Auditors during this year. This is not the case in the remaining years where the coefficients are non-null significantly, because the critical value of each of the tests is smaller than 0.05'.

Taking into account the regression model that we have just set out and the estimation of the coefficients, we can estimate the mean number of insignificant and significant errors that a report might contain according to the type of opinion and the type of auditor. In Tables 6 and 7, we give the estimation of these values for each year, observing:

		2004			2005			2006			2007	
	В	$\operatorname{Exp}(B)$	<i>p</i> (*)	В	$\operatorname{Exp}(B)$	d	В	$\operatorname{Exp}(B)$	d	В	$\operatorname{Exp}(B)$	d
Constant	1.145	3.142	0.000	0.890	2.436	0.000	0.828	2.288	0.000	0.913	2.492	0.000
Unqualified	-0.711	0.491	0.000	-0.512	0.599	0.000	-0.417	0.659	0.000	-0.416	0.660	0.000
Multinational	-0.361	0.697	0.000	-0.295	0.745	0.004	-0.333	0.717	0.001	-0.397	0.673	0.000
National audit firm	-0.201	0.818	0.030	-0.142	0.867	0.156	-0.231	0.794	0.026	-0.291	0.747	0.004
Deviance		73.845			72.189			74.491			68.552	
Value/d.f.		0.242			0.237			0.244			0.225	
χ^2 Pearson (d.f.)	62.	.952 (305 d.1	(;)	64.	654 (305 d.i		65.	319 (305 d.f	(\cdot)	62.	083 (305 d.f	
Value/d.f.		0.206			0.212			0.214			0.204	
χ^2 Contrast Omnibus (d.f.)	6	5.068 (3 d.f.)	_	1	2.204 (3 d.f.)	_	8	(966 (3 d.f.)		6	.364 (3 d.f.)	
Critical level Omnibus (p)		0.000			0.007			0.034			0.025	
Notes: $(*) p$ is the critical level Source: Authors' estimation.	of contrast. ((d.f.): Degrees	of freedom	. References	: Qualified op	inion and i	ndividual auc	litor.				

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Negative	
Table 4.	

Economic Research-Ekonomska Istraživanja 215

		2004			2005			2006			2007	
	В	$\operatorname{Exp}\left(B\right)$	<i>p</i> (*)	В	$\operatorname{Exp}(B)$	d	в	$\operatorname{Exp}(B)$	d	В	$\operatorname{Exp}(B)$	d
Constant	0.803	2.232	0.000	0.866	2.378	0.000	0.767	2.153	0.000	1.013	2.755	0.000
Unqualified	-1.580	0.206	0.000	-1.832	0.160	0.000	-1.891	0.151	0.000	-2.148	0.117	0.000
Multinational	-3.064	0.047	0.000	-1.392	0.249	0.000	-1.362	0.256	0.000	-1.577	0.207	0.000
National audit firm	-1.370	0.254	0.000	-0.922	0.398	0.000	-1.061	0.346	0.000	-1.202	0.301	0.000
Deviance		233.418			283.033			249.104			223.637	
Value/d.f.		0.765			0.928			0.817			0.733	
ζ ² Pearson (d.f.)	356.	.041 (305 d.	f.)	347	.224 (305 d.)	f.)	312.	499 (305 d.	f.)	282	.275 (305 d.	(;)
Value/d.f.		1.167			1.138			1.025			0.925	
χ^2 Contrast Omnibus (d.f.)	135	9.313 (3 d.f.	<u> </u>	13	2.063 (3 d.f.	<u> </u>	11	7.363 (3 d.f.	<u> </u>	14	5.650 (3 d.f.	~
Critical level Omnibus (p)		0.000			0.000			0.000			0.000	
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Table 5. Poisson regression model for the number of significant errors.

Notes: (*) p is the critical level of contrast. (d.f.): Degrees of freedom. References: Qualified opinion and individual auditor. Source: Authors' estimation.

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Table

	2002	t	2005	2	2006	5	2007	
	Unqualified	Qualified	Unqualified	Qualified	Unqualified	Qualified	Unqualified	Qualified
Multinational	1.0757	2.1902	1.0865	1.8130	1.0811	1.6405	1.1052	1.6753
National audit firm	1.2624	2.5702	1.2662	2.1128	1.1972	1.8167	1.2288	1.8626
Individual auditor	1.5434	3.1424	1.4594	2.4351	1.5083	2.2887	1.6438	2.4918

.

Source: Authors' estimation.

	200	4	200	5	200	9	200	7
	Unqualified	Qualified	Unqualified	Qualified	Unqualified	Qualified	Unqualified	Qualified
Multinational	0.0215	0.1042	0.0946	0.5910	0.0832	0.5516	0.0664	0.5689
National audit firm	0.1168	0.5672	0.1514	0.9455	0.1125	0.7453	0.0966	0.8278
Individual auditor	0.4598	2.2322	0.3806	2.3774	0.3250	2.1533	0.3214	2.7539
Source: Authors' estimation	on.							

Table 7. Estimated average number of significant errors.

- estimation of the mean number of insignificant errors and of significant errors by *type of auditor*. The mean number of errors of both groups that might be contained in a report with a qualified opinion is higher than if its opinion is favourable, for either type of auditor;
- estimation of the mean number of insignificant errors and of significant errors by *type of auditor and by type of opinion*. The mean number of errors that might be contained in a report for either of the types of opinion is higher if issued by an individual auditor than if issued by a company or a multinational.

6. Conclusions

The results of the study imply the non-acceptance of the hypotheses put forward, both for the case of insignificant errors and that of significant errors, since through the regression models used and having verified the adequate goodness of fit of both models by means of the Omnibus test, we can conclude that the type of opinion and the type of auditor influence the mean number of insignificant and significant errors that a report may contain. These results are in line with those of other similar studies, such as Kier and Lavesson (2010), who conclude that the audit reports of Swedish firms contain both deviations in relation to the Swedish regulations, and deviations in relation to the content of the report, and Šapina and Ibrahimagić (2011) who obtain evidence that audit reports in Bosnia and Herzegovina contain deviations both in form and in content, and establish the causes of the errors detected.

Consequently, irrespective of the type of opinion contained in the audit report, auditors working individually have a higher propensity to issue audit reports with errors, both insignificant and significant, than companies or multinationals.

In addition, taking into account each of the regression models and the values of their coefficients, we estimated the mean number of insignificant and significant errors that might be contained in an audit report for each of the years studied, according to the different values of the type of opinion and of the type of auditor, and we can affirm that:

- the mean number of errors, both insignificant and significant, that a report might contain, whatever the type of auditor, is higher in reports with a qualified opinion than in reports with a favourable opinion;
- The mean number of errors, both insignificant and significant, that might be contained in a report issued by an individual auditor, whatever his or her opinion, is higher than if the report is issued by a company or a multinational.

We believe that the Spanish Institute of Accountancy and Audit of Accounts (ICAC) must be aware of the importance of carrying out more exhaustive quality controls and, as far as our study is concerned, referring to the issue of an adequate report in terms of the content of the Technical Auditing Standards. There is an important role that must be played in this sense by both the ICAC and the corporations of auditors, both of which are aware of the existence of errors in audit reports. They are bodies that can and must solve this problem by means of technical and quality controls and of continuous training of auditors. With the publication of the new Law on Auditing of Accounts in the year 2010, the rules establish that the ICAC will exclusively assume the competences of

quality control. The reform includes the possibility that this body, through its direct supervision, can agree with third parties, including corporations of auditors, the tasks relating to quality control. Therefore the mechanisms of control are in motion.

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No potential conflict of interest was reported by the authors.

Notes

- 1. Resolution of Technical Standards of Auditing, January 19, Institute of Accounting and Auditing (1991). International Audit Standards, 700 799: Conclusions of the audit and reports.
- 2. Resolution of Technical Standards of Auditing, January 19, Institute of Accounting and Auditing (1991).
- 3. According to Recommendation 2003/361/CE, of 6 May 2003, the category of micro-firms, small and medium enterprises consists of firms that employ fewer than 250 people and whose annual turnover does not exceed €50 million or whose annual general balance sheet does not exceed €43 million.
- 4. Article 3 of Royal Legislative Decree 1/2011, July 1 (2011), by which the revised text of the Spanish Audit Law Accounts is approved.
- 5. International Standard on Auditing (ISA) 700 Forming an opinion and reporting on financial statements and ISA 705 Modifications to the Opinion in the Independent Auditor's Report.
- 6. This test is based on calculating the increase in the statistic $-2 \times$ the Naperian logarithm of the likelihood function when evaluating it at the beginning of the adjustment of the model, without considering any of the explanatory variables, ($-2LLo_{INICIAL}$), and on finishing the adjustment with the independent variables included in the model ($-2LLo_{FINAL}$). The difference is known as the increase in likelihood and is denoted by Δ_{-2Llo} . This statistic is distributed according to a Chi-squared distribution with *k* degrees of freedom, *k* being the number of independent variables in the model. The hypothesis to be tested, generally called the Omnibus test, is:

H₀: $\alpha_1 = ... \alpha_k = 0$. H₁: $\alpha_i \neq 0$ for some *i*. and the test statistic is (Álvarez-Cáceres, 2007): $\Delta_{-2LLo} = (-2LLo_{inicial}) - (-2LLo_{final})$

7. The null hypothesis affirms that the model does not fit the data, as against the alternative: that the model does fit the data.

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Appendix

Table A1. Principal errors detected in audit reports.

Insignificant errors	Significant errors
 Insignificant errors The letterhead of the audit company is missing Title of report incorrect. Incorrect identification of addressees. Incorrect identification of the firm audited: use of commercial or abbreviated names. Auditor's registry number is missing or incorrectly placed. Errors in the date of issue of the report. Spelling errors. Paragraphs badly numbered. Introductory and scope paragraph: Incorrect description of the number of the intermediate paragraph containing the limitation. Incorrect description of the number of the intermediate paragraph containing the limitation. Incorrect description of annual accounts. (1) Comparability paragraph: This emphasis paragraph placed after the opinion. Information lacking or incorrectly expressed. Explanatory paragraphs of qualified opinion: Not mentioning the application of alternative methods of audit, practical in the circumstances, for obtaining sufficient and adequate evidence that would permit the limitation found to be eliminated. Writing the qualifications in an unclear manner. 	 Significant errors Introductory and scope paragraph: No reference is made in this paragraph to the presence of scope restrictions later included in the corresponding paragraphs explaining the qualified opinion and included in the opinion paragraph. Errors in the date of the audited annual accounts, making reference to the date of last year's annual accounts. Comparability paragraph: Includes wording not in force in current models of reports. Not making reference to the chart of annual financial changes when the company is obliged to formulate it, despite including it in the management report. Explanatory paragraphs of qualified opinion: Confusion between different types of qualifications or non-inclusion thereof in the intermediate paragraphs. The effect of certain qualifications on the annual accounts is not quantified. Inclusion of qualifications in emphasis paragraphs. Repeatedly failing to mention the use or application of practical alternative audit procedures to obtain sufficient adequate evidence to permit elimination. Confusing wording and lack of information. Repeated inclusion of the same scope limitation several years running, without justifying the use of any alternative procedure that might permit elimination of that limitation.
 Opinion paragraph: Expressions ('except for') or words forming part of expressions, are 	 o the opinion of the contents of the financial statements. o The effects of certain qualifications only affect a part of the annual
 lacking. The number or situation of the qualifications paragraph is not indicated. 	 accounts. Situations mentioned in the intermediate paragraphs are not included in the opinion.
• The name of the company or the specific date of closure of annual	• Inclusion of erroneous data: date of closure of previous year or name of

another company.

Insignificant errors	Significant errors
 Includes unnecessary additional information. 	 The paragraph is not worded as laid down in the Technical Standards on reports for each type of qualification. Non-existence of the paragraph. Inclusion of two opinions.

Appendix (Continued).

Source: Author's survey.