

# **A study of audit opinions before and after the 2008 financial crisis: How do crises affect the reliability of financial information?**



## **FINAL YEAR PROJECT**

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**ABSTRACT**

The past Global Financial Crisis caused real difficulties in business across the world, and Spain was no exception. In an environment of uncertainty and turmoil, increased focus on the reliability of financial information must be made and, in turn, on audit reports. The recent literature identifies construction and manufacturing as the most affected sectors, as well as changes of auditor as a consequence of an unfavorable audit opinion. This project aims to analyse the impact of the 2008 crisis on audit opinions by studying a sample of 320 large companies in Catalonia, and see which types of material misstatements are most common before and after the crisis and other company characteristics. Our research reveals that there are indeed more qualified opinions after the crisis than before, and that the majority of misstatements found after the crisis are related to lacking information on related parties. We find that the majority of the most affected companies are from the manufacturing sector, but there is no evidence that companies with more qualified opinions change auditor more often.

**Keywords:** auditor's report, audit opinion, Catalan large companies, company industry, audit firm, financial crisis, material misstatements

## 1. INTRODUCTION

The aim of this research paper is to study the reliability of a firm's financial information in times of crises by analyzing their audit qualifications. Specifically, we have considered the Global Financial Crisis of 2008 - the time period studied being from 2005 to 2011 - and a selection of 320 large companies in Catalonia. For that purpose, looking at and analyzing the audit reports of the companies in question during the years studied has been key to finally obtaining the results for our analyses and being able to confirm or reject the hypotheses raised.

The motivation behind this research lies in the fact that whenever there is some kind of shock in the economy, whether it is endogenous or exogenous, it leads to a situation of turmoil where firms are hit and their financials are altered. In this regard, in 2008, many firms were negatively affected, decreasing their income while having difficulties in returning their loans, and, at the same time, needing more financing in order to pay debt back and continuing their operations. It is precisely for this reason that some firms may be tempted to manipulate their accounts or not disclose all the necessary information to conduct the periodical auditing controls in order to appear more financially sound than they actually are. It is therefore of crucial importance that auditors are able to detect crisis-specific types of fraud, as they should know where to put the focus of the audit during periods of turmoil.

What is done in this paper is an analysis of the audit reports for the stated time period in order to corroborate the lower reliability of financial statements provided by firms in a crisis situation, and, to do so, we compare the situation before the crisis (2005-2007) and its aftermath (2008-2011). In addition, we differentiate between three groups of companies depending on their tendency of having or not qualified audit reports throughout all these years and whether they start receiving qualified reports after the crisis. For that purpose, three distinct analyses have been carried: in the first one, using the full company sample, we see whether there are more qualified opinions after the crisis than before; in the second analysis, for a reduced sample of 60 companies, we study the material misstatements found through the comprised years on their qualified reports; lastly, in the third analysis, the focus is on the company sector, as we want to see whether the most affected by the crisis in terms of audit qualifications belong to those sectors that most suffered from the crisis, and we also focus on the change in audit firm as a consequence of having obtained a certain audit qualification.

Talking about results, our research reveals that there are indeed more qualified opinions after the crisis than before, and that the majority of misstatements found after the crisis are related to lacking information on related parties. We find that the majority of the most affected companies are from the manufacturing sector, but there is no evidence that companies with more qualified opinions change auditor more often.

Our work, besides contributing to the existing literature on this and similar topics, adds value in the sense that there was not any paper before that analyzed the nature of the material misstatements for the issuance of qualified audit opinions and, specially, before and after a financial crisis. Therefore, the information provided and the results obtained will be helpful for the auditors to know where to pay more attention when auditing a firm in times of crisis.

The paper is structured as follows: after this introduction, the theoretical framework is presented as a literature review, overseeing what research has been carried out until the present point of time regarding auditing during financial crises; then, the actual analysis is done, where we present the methodology, hypotheses and results; and lastly, you will find the discussion, conclusions and limitations. Appendices are also included to support our analysis.

## **2. THEORETICAL FRAMEWORK**

In this section we will give an overview of the theory on which our four hypotheses that will be tested later on in the project are sustained. Firstly, we will include a solid base on the reliability of financial information during financial crises with an overview of the relevant literature about audit opinions during times of crisis. Secondly, we will explore which sectors were the most affected by the 2008 crisis, and if these sectors are more prone to hiding information or to issue less reliable financial information. Thirdly, we will review whether a company change in the audit firm has some kind of effect on the audit opinion that it will obtain.

Different papers and reports will be analyzed to develop the literature review for this section, which will be useful for the reader to better understand the next section of the project consisting of the actual company data analysis on audit opinions before and in the aftermath of the 2008 financial crisis.

### **2.1. Audit opinions and the reliability of financial information during the 2008 crisis**

As economists, our intuition is that the reliability of financial information is lower during a financial crisis; a generalized decrease in profits and a wave of bankruptcies, together with mass employee layoffs and an environment of turmoil and uncertainty can increase the attractiveness for management to hide information and cook the books in an attempt to survive. In turn, this translates into qualified or even adverse audit reports.

Marian et. al., (2010) state the importance of internal controls to prevent fraudulent reporting during a financial crisis within the framework of the Sarbanes-Oxley Act and the Committee of Sponsoring Organizations of the Treadway Commission (COSO), focused in the US. In their paper, they highlight the fact that internal control provides reasonable assurance, not absolute, to an entity's management. Furthermore, they expose the limitations of these internal control systems, which are mainly simple error or mistake, collusion between people, the proper design

of internal controls, and the fact that management has the ability to override this control system. Actually, management's override of controls (or risk of fraud) is one of the main risks external auditors must test. Therefore, even though internal controls exist, there is still the need for the external auditor to test their adequate design (so that each control tests the risk it is designed to actually test), and they must be skeptical of the board's intentions (what we call professional skepticism).

In line with this paper, Zaharia et. al., (2013), focus on the role of the internal auditor and conclude that not enough importance is given to internal audit at the European level, and that legislative provisions to regulate it are not enough. After the 2008 financial crisis, in a communication on 9 December 2010, the European Commission announced measures to strengthen sanctions in the finance field and more focused on the macroeconomic level and macroprudential regulation. Nevertheless, more efforts should be made also at the corporate level.

Regarding the role of financial reporting during the 2008 crisis, also known as the Global Financial Crisis (GFC), it has been claimed that fair value accounting might have had a role in the development of the actual crisis. Nevertheless, Pinnuck, M. (2012) concluded that there is no empirical evidence for such an assumption. Most importantly, this researcher found that failure of financial reports to satisfy its stewardship objective (this is, that providers of external capital can monitor management's performance) in the years preceding the crisis could have exaggerated it. This conclusion gives us a glimpse of what we might find in the audit reports that we will examine, this is, material misstatements related to a lack of transparency when it comes to the performance of management, and probably in other aspects as well. Note that most of the research focused on the GFC is based on data taken from the US, since it is where the downturn originated, but it can be extrapolated to the Spanish situation since the crisis soon became global.

Having now mentioned some interesting insights about the framework of financial reporting during the 2008 crisis, and the role of internal controls and internal auditors, we are ready to go deeper into the topic of external auditing in the context of the past economic downturn. Two very interesting studies from the University of Vigo by Mercedes Mareque, Francisco López-Corrales and Aurea Pedrosa, the first in 2011 and the second in 2017, draw the first conclusions on the impact of the 2008 crisis on the audit reports in Spain.

The main objective of the first study is to see which types of material misstatements related to the economic crisis are present in the annual reports of Spanish listed companies from 2007 to 2009. They conclude that references to the economic crisis appear because of the going concern principle. Nevertheless, we believe this analysis is incomplete in the sense that considering only paragraphs where the term "economic crisis" is mentioned, omits others where interesting conclusions about the crisis could be drawn. Furthermore, the period studied is quite narrow, and

taking into consideration a broader period such as from 2005 to 2011 would allow the research to be more detailed and precise. Our aim therefore is to broaden this study period and to consider all paragraphs, no matter whether they explicitly mention the crisis or not.

As for their second study, the studied period is from 2007 to 2010, and they compare audit reports in order to see whether questions relating to going concern situations appear more often after 2008 than before, which turns out to be the case as they express in their conclusions. For the purpose of our study, the most useful takeaway from this paper is that the frequency of audit reports by types of opinion is presented, and the following is observed: qualified reports increased from 25,1% in 2007 to 28,82% in 2008 and 30,01% in 2009, and then decreased back to 25,15% in 2010. With the same token, unqualified reports (without emphasis of matter) decreased from 65,34% in 2007 to 3,72% in 2008, and then increased back to 59% in 2009 and 2010. Thus, in 2008, many reports had an unqualified opinion but with emphasis on matters with other questions (other than going concern). Nevertheless, this study focuses on SMEs or non listed companies, which will differ from our analysis.

From Mareque et. al., (2011, 2017) one can intuit that material misstatements expressed in audit reports before the crisis will differ from those after the crisis, since references to the going concern principle will be made, and other non explicit references and consequences of the crisis will appear.

Focusing on which types of material misstatements are the most usual in qualified audit reports, we can base our expectations on the study by Mahedero (2017), where the author analyses the most frequent misstatements found in a sample of reports from large companies in Spain in 2015. She classifies them into 8 categories and sees how frequent they are: related parties (57%), valuation adjustments (14%), provisions and subsequent events (8%), prospective and retrospective application (6%), amortization tax criteria (4%), payment terms to suppliers (2%), breach of covenants (2%), others (7%). Thus, this study gives us a clear idea on what to expect when analyzing misstatements found in qualified opinions of large Spanish companies; it will be necessary, though, to differentiate per year studied, and see the differences between misstatements post crisis and pre crisis.

Another very interesting source of information to better understand the overall picture of audit reports during a particular year are the reports issued by the CNMV (*Comisión Nacional del Mercado de Valores*, which is the organism in charge of supervising capital markets in Spain) on the supervision of annual accounts (excluding SICAVs) of issuers of securities admitted to trading on official secondary markets. We have analyzed the report issued in 2008, and for each of the entities, the paragraphs that contain the material misstatements found are presented. Their results also present a decrease in clean reports from 96% in 2007 to 94% in 2008, but this decrease is



much less pronounced than with regular companies. As for the type of misstatements, the majority of them are related to uncertainties, increasing from 3,2% in 2007 to 5,7% in 2008.

Lastly, Xu et. al., (2011, 2013) published two papers on auditors' responses to the global financial crisis in Australia for listed firms. In the first, preceding the study by Mareque et. al., (2017), they carry a descriptive study of 8382 firms during the period 2005-2009 in order to see how Australian auditors reacted to the global financial crisis. They study the frequency of different kinds of audit reports, specially those concerning going concern. They conclude that the main reason for audit report modification is indeed going concern, and that the rates of modification increased from 12% before the crisis to 18% and 22% in 2008 and 2009, respectively. Matters related to the industry and audit firm are also studied in this paper but will be discussed in the following sections.

The focus of the second paper is to shed light on whether the GFC has had an influence on the propensity of auditors to issue going concern qualifications, and whether audit effort has increased. They find an increase in the propensity to issue going concern qualifications after the crisis than before, as a reflection of their increased conservatism, and also increased audit fees.

## **2.2. Influence of the company sector on the audit opinion**

Having in mind the literature exposed before regarding the relationship between reliability of financial information and the Global Financial Crisis, it is important to understand more in depth the consequences for the different economic sectors. This will give us an idea of which ones were more affected and therefore, more likely to have less reliable information.

The 2008 Global Financial Crisis had a deep impact on the whole economy all around the globe which ended up in a liquidity crisis (Mareque et al., 2017). However, the impact on the different countries and sectors was not the same (European Commission, 2010). Moore and Mirzaei (2014) stated that those industries that relied more on external finance had a more negative shock than those relying on internal finance. That makes sense since companies and banks experienced liquidity issues in a context where the economic activity slowed down and the prices for some imported goods went up (Mareque et al., 2017).

Speaking in general terms, the economic sectors that have suffered the most in the European Union from the 2008 financial crisis are construction and industry (European Commission, 2010), contributing heavily to the fall in GDP. There is a report written by the European Commission in 2010 that shows empirical evidence for this statement. In fact, the report studies the shock of the financial crisis on key economic sectors of the EU: manufacturing and construction. Therefore, one could think *ex ante* that if the most affected sectors were two of the most important ones in Europe, it could be the case that the firms operating on these economic activities may release less reliable financial information during the crisis.

In order to have an idea of which was the impact on these two key sectors, the report shows aggregate data from Eurostat. One of the indicators they use is the average growth rate (% change compared to the same period of the previous year): during the period M1-M11 of 2009, from total manufacturing it was -15.6% and from construction -8.8% (European Commission, 2010). It can be seen that the growth rate had fallen sharply compared to the previous year, and one can understand why the decrease in GDP was mainly due to the impact of the crisis on these two sectors.

Another indicator that can show which sector was the most affected by the crisis is the shock on employment. According to a working paper published by the International Labour Office in 2010 regarding the sectoral coverage during the global economic crisis, the major economic activities that suffered the highest % change on employment level, by far, are again manufacturing and construction. The employment level change during the third quarter of 2008 and 2009 in manufacturing was -8.1%, and -6.5% in construction. The study was made with the data from 56 countries, including the EU, so we can extrapolate the results to the Spanish case. In fact, the report previously mentioned by the European Commission (2010) states that manufacturing was the most affected sector regarding job losses at the EU.

Focusing now on the specific case of Spain, it was one of the countries in the South of Europe that suffered the deepest recession compared to the rest of Europe from 2008 to 2010 (Almeida and Silva, 2019). Before 2008, the Spanish economy was experiencing a cycle of economic growth but the model was unstable. One of the factors that explain the unstable economy is the higher rate of investment in the construction sector (Mareque et al., 2017). In fact, in an article written by Martínez (2017), there appears data from *INE* stating that Spain lost a total of 85.000 million euros of GDP between 2008 and 2013, 61.000 of which were from this sector, that is, approximately a 71% of the total loss in GDP (Martínez, 2017). The second economic sector that suffered the highest fall in GDP in Spain was the manufacturing industry with a total loss of 23.000 million euros, that is, a 27% of the total decrease (Martinez, 2017). If we add up the contribution of the total loss of GDP in Spain between 2008 and 2013 from construction and manufacturing, we end up with 98%. Therefore, it can be concluded that the sectors that were most affected by the crisis in the country were these two, explaining the vast majority of the total loss of GDP during the crisis.

Lastly, Hudaib and Cooke (2005) found that companies that are financially distressed are more likely to receive a qualified audit opinion, compared to those that are not financially distressed. Thus, we would expect companies in the manufacturing and construction sectors to obtain more qualified reports after 2008 than companies in less affected sectors.

From all this information, it can be seen that the manufacturing and construction sector, as key economic activities, were the most affected not only in the world and the EuroZone, but also in the case of Spain. We can expect that the companies whose operating activities are related to these sectors could more likely show qualified opinions, or even adverse audit reports. In fact, Mareque et al. (2011) show empirical evidence regarding the relationship between the sector of the firm and the references related to the financial crisis in their audit reports. We expect that our sector analysis will be in line with these findings.

### **2.3. Influence of the audit firm on the audit opinion: changes of audit firm**

One may think that firms prefer to switch auditors if the previous one issued a qualified opinion in order to find another one that could potentially issue a more positive opinion so as to appear financially sound to the public. However, this could also be interpreted the other way around. Auditors issuing qualified opinions of firms that present many irregularities and that have a history of many changes in auditors may prefer to distance themselves from such companies in order to maintain a good reputation for other potential clients. In fact, this idea is discussed in a study about auditor switching in the oil and industry sector (DeAngelo, 1982). What is more, later studies suggest that there is a positive relationship between auditors issuing qualified opinions and firms changing auditors more often (Krishnan et al., 1996). This is, there are higher probabilities that auditors issue qualified opinions now if they know that the firm is highly likely to switch auditors in the next period.

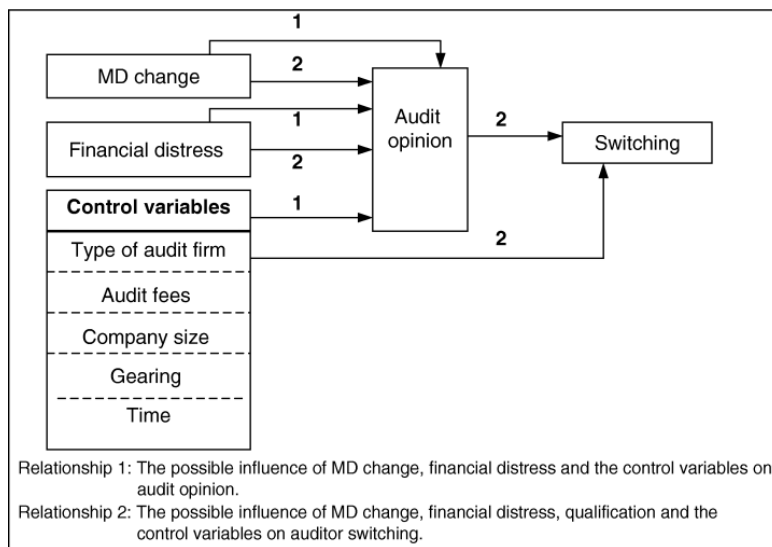
Having said that, it is worth going deeper into why auditors would issue qualified opinions, be it a period of financial distress or be it the size of the firm, for instance. It turns out that, in fact, these two variables can have an impact on the topic, and the literature points it out.

Regarding the size of the firm, studies have proven a strong association between it and the qualification of the audit opinion. Hence, the smaller the firm the more likely it is to receive a qualified opinion and, therefore, the higher the probability of auditor switching; and vice versa (Firth, 2002). This could be explained by the fact that smaller firms may have less resources when it comes to elaborating sound and realistic financial statements - lack of personnel, not enough time is invested in such tasks, lack of experience and expertise, etc. However, the size of the auditing firm plays a role in issuing qualified or not opinions and when. On the one hand, there are studies that suggest that the larger the audit firm the more likely they are to issue qualified reports (Warren, 1980). On the other hand, there are studies that suggest otherwise (Shank and Murdock, 1978). Moreover, DeAngelo (1982), taking this last position, argued that large auditing firms may want to avoid criticism in order to maintain a good reputation, so they are more likely to issue unqualified reports. However, Dye (1993) stated that, due to the greater availability of

financial resources, large firms are less afraid of issuing qualified reports that disclose the audited firms’ problems because of their greater exposure to risk.

Talking about financial distress and business risk, the literature suggests a positive relationship between business risk and a change in management directors’ organizational structure and auditor turnover (Hudaib and Cooke, 2005; Lin and Liu, 2010). In addition, a study by Citron and Taffler (1992) concluded a positive association between auditor switching and the so-called “going concern qualifications” (issuing an opinion showing doubts about the company staying in business in the near future) in distressed companies in the UK during 1977 and 1986. But as mentioned earlier, there are studies that suggest otherwise, like that by Smith (1986) and Krishnan (1994), which say that companies change auditors not because of the opinions they issue but because of the strictness of their procedures.

Figure 1. The relationships between audit opinion, explanatory factors and switching (Source: Mohammad Hudaib, T.E. Cooke, 2005)



To conclude, a study with a sample of 2935 audit reports of unlisted Spanish firms for the period 2007-2010 suggests that, indeed, when the auditor issues an unfavorable opinion, the client will more likely decide to change auditor in the future (Mareque et. al., 2017). This fact is also proven at an international level, as we already just mentioned by many studies such as: Carcello and Neal (2003), Carey et al. (2008), Chow and Rice (1982), Craswell (1988), Lennox (2000), Smith (1986) and Vanstraelen (2003).

### **3. THE ANALYSIS**

#### **3.1. Objective**

The ultimate goal of this analysis is to see whether financial information is less reliable during a financial crisis, and the indicator used is audit reports. We also want to find patterns that will allow users of financial information, as well as their preparers, to anticipate the possible effects of a financial crisis on the auditor's opinion of a company's financial statements. This way, managers can anticipate which misstatements the auditor is most likely to find in their financials, and can correct them in time so that their company can obtain an unqualified opinion.

In this section of the project we differentiate between three interrelated analyses. First, we see which types of audit opinions are more common before and after the financial crisis, and whether there is a tendency to obtain more qualified auditor qualifications after the crisis than before. Secondly, among a selection of companies from the sample, we see which types of misstatements are more common, again distinguishing between before and after the crisis. Lastly, we further the analysis by exploring if there are common traits between companies that obtain a certain type of audit qualification. Concretely, in this third section we study the sector of activity, as well as the audit firm that issues the report for the selected companies.

We believe that it is very interesting to see which material misstatements increase or decrease the most during a period of financial crisis, which is done in the second analysis, and we also want to see whether the company sector and audit firm could determine the type of auditor qualification that a company will obtain in periods of financial crisis.

This study can be a first step to understand the dynamics of financial reporting before and after a financial crisis, and can help to prevent accounting frauds by giving the auditor a glimpse of what to focus on when auditing during periods of crisis.

#### **3.2. Data obtention and sample**

For the purpose of our study, we will analyze the audit opinions obtained by a sample of 320 large companies in Catalonia through the period 2005-2011. Despite the fact that in Catalonia SMEs are predominant, we have selected this group since large companies are obliged to be audited in Spain (*Ley de Sociedades de Capital*, in article 257 of *Real Decreto Legislativo 1/2010* of the 2nd of July), and therefore more information will be available and accessible about these companies.

In order to assess the representativeness of our sample, we have obtained the number of large companies in Catalonia, in the period 2005-2011 (Idescat), and we have calculated which percentage of the total our sample represents:

Table 1. Number of large companies in Catalonia. Years 2005-2011 (Source: Idescat)

	2005	2006	2007	2008	2009	2010	2011
<b>Total large companies</b>	2.155	2.239	2.340	1.975	1.864	1.757	1.746
<b>% of the total</b>	14,85	14,29	13,68	16,20	17,17	18,21	18,33

Considering the fact that our sample considers from a 14,29% to a 18,33% of the total number of large companies in Catalonia from the period 2005-2011, we conclude that it is indeed a representative sample since it allows us to be confident that it is an accurate representation of the larger population studied. Notice that the number of large companies diminished from 2007 to 2008 and in the aftermath of the crisis due to the bankruptcies caused by it.

The database used to obtain this data is Sabi (*Sistema de Análisis de Balances Ibéricos*), applying the aforementioned restrictions regarding the type of company. Thus, the search criteria takes into account employee number, total assets and operating revenue, and distinguishes for region and audit report qualification. See the detail on Sabi below:

Figure 2. Search criteria applied on Sabi database.

SEARCH STRATEGY		Save	Print	Clear all steps
<input checked="" type="checkbox"/>	1. Number of employees: 2011, 2010, 2009, for at least one of the selected periods, min=250	3.703	3.703	
<input checked="" type="checkbox"/>	2. Total assets (th EUR): 2011, 2010, 2009, for at least one of the selected periods, min=43.000	10.434	2.046	
<input checked="" type="checkbox"/>	3. Operating revenue / turnover (th EUR): 2011, 2010, 2009, for at least one of the selected periods, min=50.000	4.484	1.736	
<input checked="" type="checkbox"/>	4. Country/Region in country: Cataluña	339.437	320	
<input checked="" type="checkbox"/>	5. Auditor report qualification: Unqualified, Qualified, Negative, Refused, Report of Auditors not available, ..., 2008, 2007, 2011, 2006, 2010, 2005, 2009, For at least one of the selected years	1.191.421	320	
Boolean search 1 And 2 And 3 And 4 And 5		Refresh		TOTAL : 320

The distribution by sectors of activity of the companies in the sample are summarized in the table below. We have differentiated each firm by group using the National Classification of Economic Activities (CNAE) code . CNAE codes have 4 digits that range from 0111 to 9900, and there are 17 main industry groups, each containing several industry subgroups differentiated by their codes.

Table 2. Sectoral distribution of the sample

Sector	%	Sector	%
Extractive industries	0,31%	Information and communications	3,45%
Manufacturing industry	45,45%	Financial activities and insurance	0,94%
Artistic activities and entertainment	1,25%	Professional and scientific activities	2,82%
Education	0,31%	Administrative activities and auxiliary services	0,94%
Construction	6,6%	Real estate	2,2%
Wholesale and retail; motor vehicle	22,26%	Supply of electric energy, gas, vapour	1,9%

and motorcycle repair		and air conditioning	
Transport and storage	5,32%	Health activities and social services	2,2%
Hostelry	2,2%	Supply of water, sanitation activities, waste management and decontamination	1,6%
Other services	0,31%		

To see how the audit firms market is distributed in our 320 company sample, we differentiate in the table below between those companies audited all years by a Big 4, by a non Big 4 or by both, during the period 2005-2011:

*Table 3. Distribution of the audit firms market in the sample*

Audit firm	Big 4	Non Big 4	Both
%	74,58%	11,86%	13,56%

There will be two periods studied: 2005-2007 (before the crisis) and 2008-2011 (after the crisis). Furthermore, for the second and third analyses mentioned in the objective of the present work, we have reduced the sample to 60 companies. We have created 3 distinct groups of 20 companies each:

- **Group A:** these companies present only unqualified opinions through the years before the crisis (from 2005), and after the crisis they present only qualified opinions until 2011
- **Group B:** these companies present a qualified opinion all years from 2005 to 2011
- **Group C:** these companies present both qualified and unqualified opinions throughout the period studied

### 3.3. Hypotheses

The analysis carried out in this study is both qualitative and quantitative, and to comply with its objective, we want to test the following hypotheses:

- **Hypothesis 1:** more companies present a qualified opinion in their financial statements' auditor report after the crisis (2008-2011) than before the crisis (2005-2007).
- **Hypothesis 2:** of all misstatements found in qualified audit reports, a higher percentage of those found in the period after the financial crisis, are related to insolvency and management's willingness to underestimate losses and hide information, compared to those found before the financial crisis.
- **Hypothesis 3:** the sector of activity (by CNAE code) of companies in Group A will be of those most affected by economic crises, such as manufacturing and construction.

- **Hypothesis 4:** companies in Group B change auditor more often than those in Groups A and C

### 3.4. Methodology

Firstly, in the theoretical framework, the existing literature related to auditing and the reliability of financial information during the 2008 financial crisis has been summarized. This part is fundamental to understand the coming analysis, and therefore is the first step of our methodology. These previous studies allow us to have a clearer picture of what to expect from our research, and serve as well as a precedent for our conclusions.

For the practical part of this project, consisting of an empirical analysis of a data set, we have combined both qualitative and quantitative methods to obtain our results. The qualitative methods have consisted on a descriptive analysis of the data, while the quantitative methods have consisted on a hypothesis testing using a Chi-Square test (used to study whether there exists a statistical association between two categorical variables on a quantitative basis).

For Analysis I, we have accompanied a descriptive analysis of the data on audit opinions with a Chi-Square test in order to test Hypothesis 1.

For Analysis II, a purely descriptive analysis has been conducted to see whether Hypothesis 2 holds or not.

Lastly, for Analysis III, a purely qualitative analysis has been carried out to test Hypothesis 3 on companies' sectors, since data can be clearly interpreted and a simple description can be made. For the purpose of testing Hypothesis 4, a quantitative method has been used consisting of a Chi-Square test, useful to accurately see whether there are more changes in audit firms in a certain group than in the others.

### 3.5. Results

#### 3.5.1. Analysis I

In this subsection the procedure for the analysis has consisted of grouping all data on audit opinions for all companies for each year, and seeing if more qualified opinions appear after 2008. Of the initial sample of 320 companies, we have not considered the ones currently extinguished (44) or in liquidation (13), which left us with a total sample of 263 companies for this analysis.

The results are clear and can be summarized in the table below (see Appendix 1 for more detail):

*Table 4. Breakdown of audit opinions for the sample of 263 companies 2005-2011*

	2005	2006	2007	2008	2009	2010	2011
<b>Unqualified</b>	<b>66,9%</b>	<b>59,7%</b>	<b>62,7%</b>	<b>56,3%</b>	<b>52,9%</b>	<b>55,9%</b>	<b>39,2%</b>



<b>Qualified</b>	<b>23,2%</b>	<b>33,5%</b>	<b>31,9%</b>	<b>39,5%</b>	<b>41,4%</b>	<b>39,5%</b>	<b>57,8%</b>
<b>Adverse</b>	0,4%	0,4%	0%	0%	0%	0%	0%
<b>Disclaimer of opinion</b>	0%	0,4%	0,4%	0%	0,4%	0,4%	0%
<b>No data</b>	9,5%	6%	5%	4,2%	5,3%	4,2%	3%

Focusing on unqualified and qualified opinions only, qualified reports increase by 8% from 2007 to 2008, while unqualified reports decrease by 7% in the same period. The tendency is maintained through the post crisis period and, most notably, in 2011 the number of qualified reports increases substantially as compared to the pre crisis period, and the opposite happens with unqualified reports.

Furthermore, in order to assess the relationship between the number of qualified opinions and the period of crisis we have carried out a test of independence with a 5% significance level. The null hypothesis is H0: they are independent and the alternative is H1: they are not independent.

With the following contingency table, we have run the chi-square test:

*Table 5. Contingency table for the testing of Hypothesis 1*

	<b>UNQUALIFIED</b>	<b>QUALIFIED</b>	<b>TOTAL</b>
<b>BEFORE CRISIS</b>	498	233	731
<b>AFTER CRISIS</b>	537	469	1006
<b>TOTAL</b>	1035	702	1737
<b>CHI-SQUARE</b>	37.619		
<b>P-VALUE</b>	8.599e-10		

Since the p-value is  $<0,05$ , we reject the null, that is, we can say that there exists a significant relationship between the number of qualified opinions and the period of crisis.

### **3.5.2. Analysis II**

In this subsection of the project the most extensive analysis has been conducted. As mentioned, a purely qualitative approach has been taken to analyze the results.

As well as storing the type of audit opinion of a company's financial statements, the Sabi database also displays, for each company with a qualified report, the paragraph where the material misstatements found are explained by the auditor. Our analysis has consisted of classifying all material misstatements found for all companies in groups A, B, and C, distinguishing between

the period before the crisis and after the crisis. This methodology has allowed us to see which types of misstatements are more common in both periods, and therefore Hypothesis 2 has been tested. We hypothesized that a higher percentage of misstatements found after the crisis would be related to insolvency and management's willingness to underestimate losses and hide information, compared to those found before the financial crisis. In Appendix 2, we have included the transcript of a sample of these paragraphs provided by Sabi (in Spanish/Catalan), so that the reader can better understand which type of misstatements are included in each section of the classification. The classification in question is an adaptation of that used by Mahedero (2017), where she classified the audit opinions of a sample of large companies for 2015. Thus, we distinguish between 10 main groups:

1. Related parties: misstatements related to a lack of information on related parties.
2. Valuation adjustments: includes misstatements related to depreciation, incorrect valuations, etc.
3. Accruals, contingencies and subsequent events: subsequent events are those events that occur after the end of the year and that imply an adjustment of the financial statements.
4. Prospective and retrospective applications: includes mainly cases where they provide against reserves amounts that go against results, and the other way around.
5. Amortization tax criteria: amortization must be recorded in a systematic way depending on the useful life of the assets and their residual value
6. Payment terms to suppliers: not including them in the annual accounts report when it is mandatory
7. Tax matters: includes inspections by the Tax Authorities, pending taxes, etc.
8. Others: includes misstatements related to missing information, tax credits, accounts receivable, etc.
9. Emphasis paragraph: the auditor emphasizes a matter that does not modify the opinion.
10. No data: Sabi provides no information on material misstatements.

See the summary of our results in the table below:

*Table 6. Classification of material misstatements found in our sample before and after the crisis*

	GROUP A		GROUP B		GROUP C	
	BEFORE	AFTER	BEFORE	AFTER	BEFORE	AFTER
<b>TOTALS (absolute terms)</b>	<b>0</b>	<b>80</b>	<b>81</b>	<b>108</b>	<b>40</b>	<b>47</b>
<b>1. RELATED PARTIES</b>	<b>0%</b>	<b>71,25%</b>	<b>20,99%</b>	<b>52,78%</b>	<b>20%</b>	<b>46,81%</b>

1.1. Lacks information on administrators/lacks breakdown of the remunerations of administrators and managers	0%	67,5%	13,58%	32,41%	10%	38,3%
1.2. Lacks information on conflicts of interest	0%	1,25%	0%	5,56%	0%	0%
1.3. Lacks information on other related parties (group companies, joint businesses and companies with significant influence)	0%	2,5%	7,41%	12,96%	7,5%	4,26%
1.4. Market prices in transactions with related parties	0%	0%	0%	1,85%	0%	0%
1.5. Absence of an administrator's signature	0%	0%	0%	0%	2,5%	4,26%
<b>2. VALUATION ADJUSTMENTS</b>	<b>0%</b>	<b>13,75%</b>	<b>20,99%</b>	<b>9,26%</b>	<b>22,5%</b>	<b>19,15%</b>
2.1. Evidence not obtained on whether it is necessary to carry a valuation adjustment	0%	12,50%	20,99%	8,33%	5%	12,77%
2.2. Depreciation not done	0%	0%	0%	0%	0%	0%
2.3. Evidence not obtained on depreciation done	0%	0%	0%	0,93%	0%	2,13%
2.4. A valuation adjustment is needed which would change the financial statements	0%	1,25%	0%	0%	17,5%	4,26%
<b>3. ACCRUALS, CONTINGENCIES AND SUBSEQUENT EVENTS</b>	<b>0%</b>	<b>3,75%</b>	<b>8,64%</b>	<b>7,41%</b>	<b>15%</b>	<b>2,13%</b>
3.1. Not doing accruals	0%	0%	0%	3,7%	12,5%	0%
3.2. Registering accruals by a different amount	0%	3,75%	3,7%	3,7%	0%	0%
3.3. Not informing on contingencies	0%	0%	3,7%	0%	0%	0%
3.4. Subsequent events	0%	0%	1,23%	0%	2,5%	2,13%
<b>4. PROSPECTIVE AND RETROSPECTIVE APPLICATIONS</b>	<b>0%</b>	<b>1,25%</b>	<b>1,23%</b>	<b>0,93%</b>	<b>5%</b>	<b>2,13%</b>

4.1. Provide against reserves amounts that go against results	0%	0%	1,23%	0%	5%	0%
4.2. Provide against results amounts that go against reserves	0%	0%	0%	0,93%	0%	2,13%
4.3. Provide accruals without charging them in the PL	0%	1,25%	0%	0%	0%	0%
4.4. Not deferring revenue/expenses	0%	0%	0%	0%	0%	0%
<b>5. AMORTIZATION TAX CRITERIA</b>	<b>0%</b>	<b>0%</b>	<b>4,94%</b>	<b>7,41%</b>	<b>0%</b>	<b>0%</b>
<b>6. PAYMENT TERMS TO SUPPLIERS</b>	<b>0%</b>	<b>1,25%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
<b>7. TAX MATTERS</b>	<b>0%</b>	<b>5%</b>	<b>7,41%</b>	<b>6,48%</b>	<b>10%</b>	<b>0%</b>
<b>8. OTHERS</b>	<b>0%</b>	<b>2,50%</b>	<b>29,63%</b>	<b>12,96%</b>	<b>17,5%</b>	<b>19,15%</b>
8.1. Accounts receivable	0%	0%	0%	0%	10%	6,38%
8.2. Incorrect recognition of tax credits	0%	0%	1,23%	0%	0%	2,13%
8.3. Treasury stock	0%	0%	0%	0%	0%	0%
8.4. Not including certain information	0%	0%	17,28%	7,41%	7,5%	2,13%
8.5. Interventions by certain official organisms not concluded	0%	2,50%	8,64%	5,56%	0%	8,51%
8.6. Contentious-administrative jurisdiction	0%	0%	2,47%	0%	0%	0%
<b>9. EMPHASIS PARAGRAPH</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>2,13%</b>
<b>NO DATA</b>	<b>0%</b>	<b>1,25%</b>	<b>6,17%</b>	<b>2,78%</b>	<b>10%</b>	<b>8,51%</b>

Note that between 1,25% and 10% of the misstatements for each period and group cannot be properly identified since there is no data provided on Sabi.

The groups that represent the largest percentages are 1) Related parties and 2) Valuation adjustments. As for the former, the most frequent case was not disclosing information on high management remuneration.

Most interestingly and in line with our second hypothesis, during the aftermath of the financial crisis, misstatements related to omitted information on related parties increased by 31,79% in Group B and by 26,81% in Group C. Notably, companies in Group A present 71,25% of misstatements about related parties after the crisis, of which 67,5% express lacking information on administrators' remuneration. Thus, there is a clear intention to hide this type of information specially after the crisis. On the contrary, though, misstatements related to other information missing (8.4), decrease by 9,87 and 5,37% in Group B and C, respectively.

As for the other types of misstatements in our classification, these points decrease in % after the financial crisis: 2) Valuation adjustments, 3) Accruals, contingencies and subsequent events, 4) Prospective and retrospective applications, 6) Payment terms to suppliers, and 7) Tax matters.

Misstatements related to amortization (point 5) are only present in Group B, and increase from 4,94% to 7,41% after the crisis. It is also worth mentioning that in point 8.5, regarding interventions by official organisms such as the CNMV (*Comisión Nacional del Mercado de Valores*), we cannot extract a clear conclusion on whether there are more or less misstatements of this kind after the crisis, but there is surely a significant amount of them all over the two periods (between 2,5% and 8,64%).

Emphasis paragraphs only appear after the crisis in Group C and therefore we do not consider them significant for our analysis.

As for Hypothesis 2, while it is true that there is a clear intention to hide information on related parties after the crisis, specially when it comes to administrators' remuneration, we have not found evidence on management's willingness to underestimate losses or hide insolvency. On the contrary, misstatements related to valuation adjustments decreased in percentage after the crisis.

### **3.5.3. Analysis III**

Within this analysis we want to find out whether we can predict which groups of companies are more likely to be affected by an economic crisis, in terms of audit opinions, depending on the sector they operate (see Appendix 3 for the company detail).

As our hypothesis ex ante was that the manufacturing sector was the most affected by the financial crisis, we have compared the number of companies operating in this sector to others for each group. Our focus therefore is on the third group (C. Manufacturing Industry), which contains CNAE codes from 1011 (Processing and meat preservation) to 3320 (Industrial equipment and machinery installation). The following contingency table summarizes this information:

Table 7. Contingency table for testing Hypothesis 3

	A		B		C	
	Abs.	%	Abs.	%	Abs.	%
<b>MANUFACTURING</b>	15	75	7	35	8	40
<b>OTHERS</b>	5	25	13	65	12	60
<b>TOTAL</b>	20	100	20	100	20	100

From this data, we can observe a clear focus point on Group A. Within this group there are approximately 40% more firms operating in manufacturing than in Group B and C. This sheds light on our third hypothesis, since companies in Group A are those that had unqualified opinions before the crisis, but began to have qualified opinions afterwards. Thus, we are confirming the fact that the sector of activity of the companies most affected by the economic crisis in terms of audit opinions (Group A), is the manufacturing sector. As for the other sectors of companies in Group A, the second most representative is services. Sectors of companies in Groups B and C are quite diverse, ranging from manufacturing, wholesale and retail mainly.

Now we want to test whether there exists a relationship between the three groups of firms (A, B, C) and the change of auditors before and after the crisis. The following contingency table summarizes how many firms change the auditor before and after the crisis. This information is used to run an independence test with a 5% significance level.

Table 8. Contingency table for testing Hypothesis 4

	A			B			C		
	CHANGE	NO CHANGE	TOTAL	CHANGE	NO CHANGE	TOTAL	CHANGE	NO CHANGE	TOTAL
<b>BEFORE CRISIS</b>	5	15	20	4	16	20	7	13	20
<b>AFTER CRISIS</b>	3	17	20	6	14	20	8	12	20
<b>TOTAL</b>	8	32	40	10	30	40	15	25	40
<b>X2</b>	0,15625			0,13333			0		
<b>P-Value</b>	0,6926			0,715			1		

After running the chi-square test for each sub-group of firms, we have obtained non-significant results since the p-value  $>0,05$ . Hence, there does not exist significant evidence that in periods of financial crisis firms, without group distinction, change auditors more often.

#### 4. DISCUSSION

Let us now summarize the key findings of our study. Firstly, the results support the theory that there are indeed more qualified audit reports for the same group of companies in the aftermath of the 2008 financial crisis than there were before. This result goes in line with those of Mareque et al., (2017), and although the percentages of the types of reports per year are slightly different, the conclusion is the same. This goes also hand in hand with the report of 2008 by the CNMV, although results cannot directly be compared since their sample includes entities operating in Spanish financial markets, rather than large companies. While in 2007 qualified reports were 31,9% of the total, in 2009 this percentage rose to 41,4%, making it clear that there were indeed more material misstatements after the crisis.

Taking audit qualifications as an indicator of the reliability of financial information, it can be concluded that there are indeed more attempts to misstate financial information during a period of crisis, and it would be the case that the reliability of this information is lower if it wasn't for the external auditor, who is of crucial importance in detecting flaws in companies' financials and exposing them to the information users.

The motivations behind these attempts to hide information or to misrepresent financial statements are varied: intention to underestimate losses in an attempt to survive, willingness to hide sensitive information to stakeholders, etc. The main implication of this result is that economic agents must be more alert during a crisis because there is a higher probability that the financial statements of companies do not reflect in all material aspects the true situation of the entity. In turn, auditors' effort ought to be higher in order to detect all misstatements.

Focusing now on qualified audit reports, it is no surprise that the most commonly found material misstatements through the period 2005-2011 are those related to related parties and valuation adjustments, since Mahedero (2017) also found these two types to be the most commonly found in large companies in 2015. What is really surprising and most interesting is that in all three groups (A, B and C), misstatements related to related parties and, specifically, to information lacking on administrators and their remuneration, increase dramatically after the crisis (by 71,25%, 31,79% and 26,81%, respectively). This does not come as a surprise due to the fact that top positions tend to earn high salaries that are maintained despite periods of financial turmoil, while workforce reductions take place together with salary cuts for employees. This can now be seen as well with the Covid crisis in 2020-2021, since massive layoffs in banking are taking place while top management's remuneration is increased and banks keep making millions in profits. Thus, there are real incentives for hiding information in an attempt to avoid discontent. As for the increase of misstatements related to valuation adjustments after the crisis, intentions to whitewash profits and difficulties to correctly value assets are brought to light. While previous research has

focused on a certain year, making the comparison between pre and post crisis demonstrates that there really is a difference between both periods, and sheds light on what to focus on when auditing a company during an economic downturn.

Regarding the third analysis, in line with the literature, we find that 75% of the companies in Group A, which are the most affected by the crisis in terms of audit qualifications, operate in the manufacturing sector, while this percentage is only 35% in Group B and 40% in Group C. The report by the European Commission in 2010 already pointed out that industry and construction were the most affected sectors in 2008, even though we find no evidence on the construction side. Efforts made by management to hide information on their bad results and about their salary in the manufacturing industry is a tendency which has not been explored before. Thus, our conclusion is that companies in the sectors that are most affected by a crisis will also be more prone to have less reliable financial information.

Lastly, contrary to the results of previous studies (DeAngelo, 1982; Krishnan et al., 1996), which suggest that there is a positive relationship between auditors issuing qualified opinions and firms changing auditors more often, our data does not support these findings. Carrying out a Chi-square test, we obtain non significant evidence for this assumption and we reject our null hypothesis, which states that companies in Group B (those with qualified opinions every year from 2005 to 2011) change auditor more often than those in Groups A and C. Our results suggest that this relationship between qualified opinions and changing auditor does not exist for our sample. Nevertheless, taking into account that we only consider 20 companies per group in this analysis, it is reasonable that results do not coincide with previous literature. Therefore, a larger sample size would help corroborate these findings.

## 5. CONCLUSIONS

Within this research we have studied the impact of the Global Financial Crisis on audit opinions of firms from Catalonia using three interrelated analyses. Using a sample of 320 large companies in Catalonia extracted from the database SABI, we have first studied their audit report qualifications through the period 2005-2011, focusing specifically on those years with qualified reports, so as to see which type of misstatements were more common before and after 2008. Later, we have focused on company characteristics, namely, their sector of activity and their audit firm. Differentiating for three distinct analysis groups (A, B and C) has allowed for a deeper understanding of the crisis effect on companies with different kinds of audit qualification patterns. Our study reveals that qualified and unqualified reports showed an inverse tendency within our period of study (pre and post crisis): while qualified reports increased after the crisis, the number of total unqualified reports went down. In fact, the Chi-Square test confirms that there is



significant evidence that there exists a relationship between the number of qualified reports and crises. Therefore, we can conclude that Hypothesis 1 is confirmed: there is indeed a tendency to obtain more qualified reports after a financial crisis.

Furthermore, analyzing the different material misstatements after the crisis from each of the three groups of firms, we found out that the most common one was about related parties, specifically lacking information on administrator's remuneration. In fact, those firms that did not show qualified reports before the crisis and only presented unqualified opinions after the crisis (Group A) notably presented a higher % of this type of misstatement compared to the other two groups. On the contrary, although misstatements about valuation adjustments also played an important role jointly with related parties, they only increased in Group A after the crisis. Hence, we cannot confirm the whole Hypothesis 2 since we did not find evidence to say that after a crisis, misstatements are more related to insolvency or underestimated losses. However, we can say that a considerable part of misstatements post crisis are related to lacking information regarding related parties.

One of the consequences of the 2008 financial crisis is that it affected in a non-homogeneous way the different economic sectors. From our study, and in line with the previous literature, we can affirm that those companies which belong to the manufacturing sector were the most affected by the crisis in terms of audit opinions. Companies in Group A had the highest % of companies whose classification by CNAE code was "manufacturing activities". Therefore, we can confirm Hypothesis 3.

Lastly, even though our expectation *ex ante* was that companies in Group B would have changed auditor more often than those in Groups A and C, the results of the carried Chi-square test made us reject the null hypothesis. Therefore, there is no significant evidence to confirm Hypothesis 4.

## **6. LIMITATIONS AND AVENUES FOR FUTURE RESEARCH**

With all the findings discovered thanks to this study, we think that it could be interesting to do a similar study at the national level, not only considering companies in Catalonia. It could be useful to compare the behaviour of audit opinions in periods of crisis using a wider sample size, this is, at a larger scale, to have a bigger picture of the situation in Spain overall.

The worldwide Covid-19 crisis is still at an early stage; countries are currently suffering economically and working on containing the pandemic at the same time. We believe that an interesting study could arise from the comparison of our study and a future one based on the Covid pandemic crisis using the same (or similar) approach. However, we must wait for the economy to run its course in order to study the behavior of audit opinions during this recent crisis period. An interesting comparison can be made between the most frequent misstatements found during the

2008 crisis and the Covid-19 one, even though we expect that information on related parties will keep being a relevant one in this recent crisis.

As for the awareness of the most common misstatements on periods of financial turmoil, an analysis of the possible solutions, such as rules or legislations, that could solve or help to manage its prevention could be an important and useful focus point for future research.

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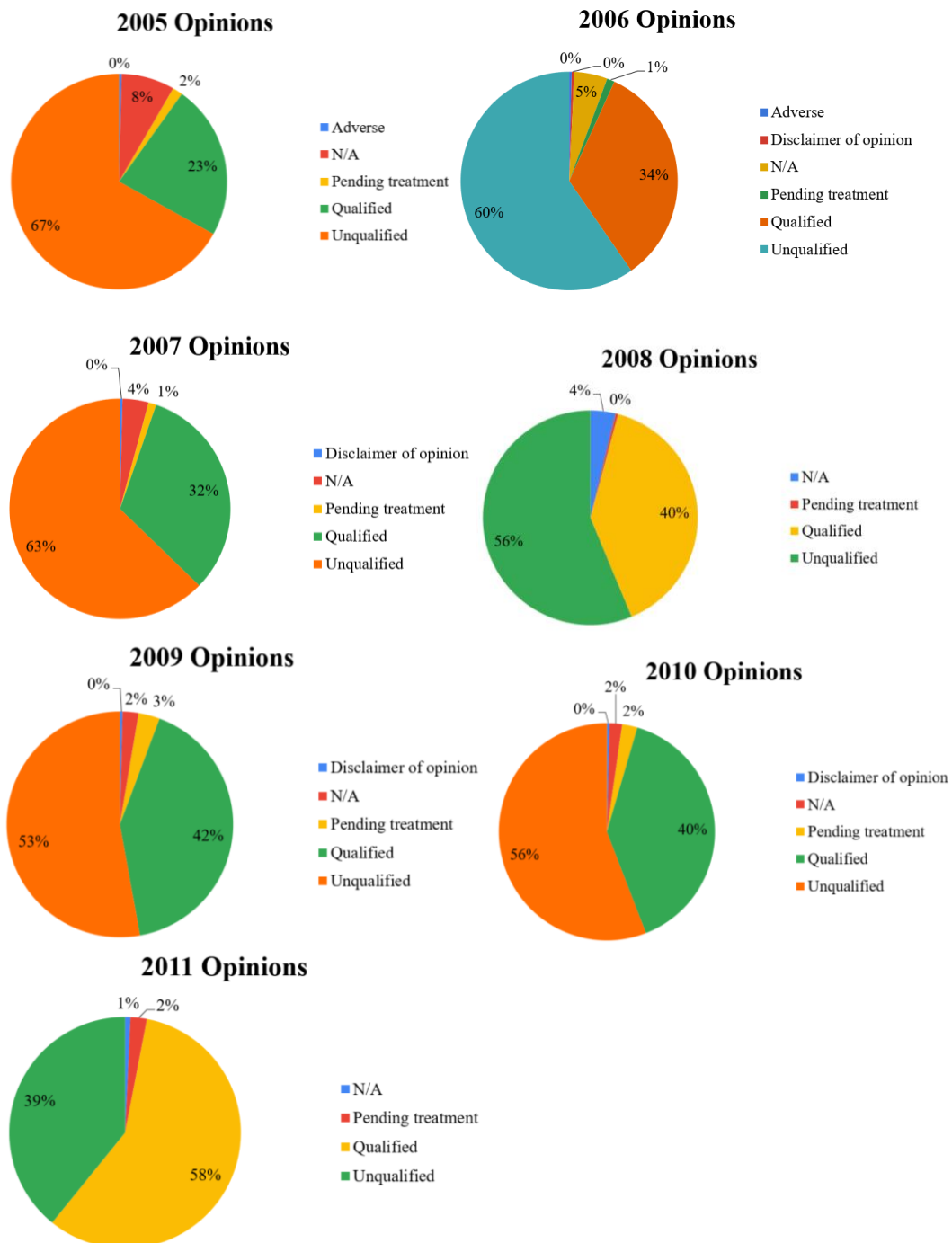
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8. APPENDICES

8.1. Appendix 1: % of audit opinions for all 320 companies (full sample) by year

Figure 3. Graphical representation of yearly audit reports by type, 2005-2011 (Appendix 1)



## **8.2. Appendix 2: Transcript of a sample of misstatements analyzed in each category (in Spanish)**

### **1. Related parties**

#### **1.1. Lacks information on administrators/lacks breakdown of the remunerations of administrators and managers (Seat SA, 2009)**

*“La memoria adjunta no incluye la información requerida por el artículo 200.9 de la ley de sociedades anónimas, relativa a la remuneración de los administradores y los miembros de la alta dirección que, como se indica en la nota 21 de la memoria adjunta, se ha remitido por los administradores al accionista único de la sociedad.”*

#### **1.2. Lacks information on conflicts of interest (Havas Media Group Spain, 2010)**

*“La sociedad no ha desglosado en las cuentas anuales adjuntas, la información requerida en el artículo 229 de la ley de sociedades de capital, correspondiente a las situaciones de conflicto de intereses y a los cargos y participaciones que ostentan los administradores así como las personas vinculadas a ellos, en sociedades con el mismo, análogo o complementario género de actividad al que constituye su objeto social.”*

#### **1.3. Lacks information on other related parties (Eurofred SA, 2008)**

*“Por las razones que se indican en las notas 1 y 20 de la memoria, las cuentas anuales adjuntas no presentan información relativa a determinadas sociedades con las que la sociedad conforma una misma unidad de decisión, ni la información relativa a las participaciones y cargos mantenidos por el administrador único y las funciones desarrolladas por este en sociedades cuyo objeto social es idéntico, análogo o complementario al desarrollado por la sociedad, tal y como requiere la legislación vigente en relación a la preparación de cuentas anuales.”*

#### **1.4. Market prices in transactions with related parties (Hospital Sant Joan de Reus SA, 2011)**

*“Durante los ejercicios 2010 y 2011, la entidad ha realizado transacciones por prestación y recepción de servicios con las entidades vinculadas a Gestion comarcal hospitalaria SA. y Centro M.Q. Reus SA, por los importes indicados en la nota 18.1 de la memoria adjunta. A la fecha de emisión del presente informe, no hemos dispuesto de dichos criterios y precios aplicados en las mencionadas operaciones. por este motivo no hemos podido verificar el cumplimiento de las normas de valoración contables en relación con las mencionadas operaciones vinculadas.”*

#### **1.5. Absence of an administrator’s signature (Quimidroga, 2010)**

*“Las cuentas anuales adjuntas formuladas en fecha 31 de marzo de 2010, no han sido firmadas por uno de los cinco administradores de la sociedad. Desconocemos a la fecha de emisión del presente informe las implicaciones que pudieran derivarse sobre las cuentas anuales adjuntas como consecuencia de la ausencia de dicha firma.”*

## **2. Valuation adjustments**

### **2.1. Evidence not obtained on whether it is necessary to carry a valuation adjustment (Roche diagnostics, 2005)**

*“Como se indica en la nota 7 de la memoria de las cuentas anuales adjuntas, al 31 de diciembre de 2005 el capítulo de inmovilizaciones financieras del balance de situación adjunto incluye 1.532 miles de euros correspondientes al valor neto contable de la participación adquirida y el crédito participativo otorgado durante el ejercicio 2005 a Emminens Healthcare Services SL debido a que la sociedad no dispone de proyecciones económicas y financieras que permitan obtener evidencia suficiente y adecuada de la recuperabilidad del mencionado importe, no podemos concluir sobre la necesidad, en su caso, de efectuar correcciones valorativas al importe de dicha inversión al 31 de diciembre de 2005.”*

### **2.2. Depreciation not done**

N/A

### **2.3. Evidence not obtained on depreciation done (Grup Baucells Alimentació SL, 2011)**

*“El epígrafe "Activos por impuesto diferido" del balance de situación adjunto incluye 15.450 miles de euros en concepto de créditos fiscales, registrados en ejercicios anteriores, derivados de bases imponibles negativas pendientes de compensar (véase nota 14 de la memoria adjunta). De acuerdo con principios y criterios contenidos en el marco normativo de información financiera, los activos por impuesto diferido sólo se reconocerán en la medida en que resulte probable que la sociedad disponga de ganancias fiscales que permitan la aplicación de estos activos. En este sentido no hemos dispuesto de un plan de negocio que nos permita satisfacernos acerca del valor recuperable de dichos activos, por lo que no nos ha sido posible estimar el importe del deterioro que sería necesario registrar.”*

### **2.4. A valuation adjustment is needed which would change the financial statements (Bioiberica SAU, 2011)**

*“Tal y como se indica en la nota 11 de la memoria de las cuentas anuales adjunta, al 31 de diciembre de 2011 la sociedad ha registrado una corrección valorativa de las existencias de la línea de negocio de Heparina por importe de 3.182 miles de euros al considerar que su coste a dicha fecha es superior a su valor neto de realización. En base al trabajo realizado y atendiendo a los principios y criterios contables de aplicación, consideramos que dicha corrección valorativa no debería haber sido contabilizada ya que las existencias objeto de corrección han sido vendidas a terceros a la fecha de emisión de este informe y a precios superiores a su coste al 31 de diciembre de 2011. En consecuencia, el epígrafe de "existencias" del balance al 31 de diciembre de 2011 y el "resultado antes de impuestos" del ejercicio 2011, se encuentran infravalorados en 3.182 miles de euros.”*



### **3 Accruals, contingencies and subsequent events**

#### **3.1. Not doing accruals (Quimidroga SA, 2007)**

*“Como se indica en la nota 8 de la memoria, la sociedad posee un 8,21% de acciones propias, teniendo registrada al 31 de diciembre de 2007 una inversión de 8.710 miles de euros. De acuerdo con las cuentas anuales consolidadas auditadas de 2007 del grupo del cual la sociedad es la sociedad dominante, su valor teórico contable, considerando las plusvalías tácitas (fondo de comercio) pagadas en las sucesivas adquisiciones y su amortización posterior, es inferior a la inversión contabilizada en 722 miles de euros. Consiguientemente, debería dotarse, con cargo a reservas, una provisión por depreciación por el mencionado importe.”*

#### **3.2. Registering accruals by a different amount (Elix Polymers SLU, 2011)**

*“Tal como se indica en la nota 6 de la memoria adjunta, al 31 de diciembre de 2011, la sociedad tiene registrada una provisión por deterioro del inmovilizado material por importe de 46.143 miles de euros, resultando un valor neto contable del inmovilizado material por importe de 512 miles de euros. Tal y como se menciona en la nota 15 de la memoria adjunta, la sociedad tiene registrada una provisión por desmantelamiento del inmovilizado material por importe de 11.390 miles de euros y el epígrafe del inmovilizado material correspondiente a la indicada provisión por un importe de 7.994 miles de euros está deteriorado en su totalidad. La estimación de dicha provisión fue realizada considerando el test de deterioro del inmovilizado material.”*

#### **3.3. Not informing on contingencies (Badalona Serveis Assistencials, 2005)**

*“La societat ha classificat com ingressos a distribuir en diversos exercicis ingressos d’exploració, dels exercicis 2003 al 2005, per un import total 450.579,62 euros que es destinaran al finançament d’obres de reforma de les consultes externes de l’hospital. Com a conseqüència del criteri seguit per la inspecció de la seguretat social en relació a l’aplicació de l’epígraf de cotització pels conceptes d’accidents de treball i malalties professionals al règim general de la seguretat social de determinat personal assistencial, en cas d’una possible actuació inspectora poden originar-se per i hospital contingències passives de caràcter laboral. A la data d'emissió del present informe resta pendent de signatura amb el servei català de la salut la clausula de suport econòmic per l'atenció sociosanitària i les corresponents a l'exercici 2005 que preveu el sistema de compra de serveis en base poblacional.”*

#### **3.4. Subsequent events (Bureau Veritas Inspección y Testing SLU, 2007)**

*“Como se describe en la nota 19 de la memoria, la sociedad se encontraba a la fecha de formulación de las cuentas anuales bajo inspección fiscal en curso. Con fecha 10 de abril de 2008 la administración tributaria levantó actas, firmadas en conformidad, con un coste para la sociedad de 291 miles de euros. Consecuentemente, el resultado y el pasivo de la sociedad en las presentes cuentas anuales se encuentra infravalorado en 291 miles de euros.”*

#### **4. Prospective and retrospective applications**

##### **4.1. Provide against reserves amounts that go against results (Hydro Building Systems, 2006)**

*“Durante el mes de diciembre de 2005, la sociedad alcanzó un acuerdo para la transmisión de la línea de negocio de PVC a un tercero, habiéndose contabilizado el resultado de la misma al cierre del ejercicio 2005. Conforme a las cláusulas del pertinente contrato, la transmisión de la propiedad de la citada línea de negocio se ha efectuado el 25 de enero de 2006, momento de la elevación a escritura pública del citado acuerdo, de modo que los riesgos y beneficios sustanciales de la citada línea de negocio permanecieron bajo control de la sociedad hasta dicha fecha. Conforme a lo descrito, las reservas a 31 de diciembre de 2006 se encuentran sobrevaloradas en 324 miles de euros y el resultado del ejercicio anual terminado en dicha fecha se encuentra infravalorado en el mismo importe.”*

##### **4.2. Provide against results amounts that go against reserves (Quimidroga, 2008)**

*“Tal y como se describe en la nota 1 de la memoria, la sociedad ha dotado, con cargo a gastos del ejercicio 2008, una provisión de 1.223 miles de euros por las actas levantadas por la administración tributaria por el impuesto especial del alcohol y bebidas derivadas de los ejercicios 1998, 1999 y 2000. En caso de haberse registrado dicha operación de acuerdo con las normas contables generalmente aceptadas, 1.190 miles de euros correspondientes a dicha provisión deberían haberse contabilizado con cargo a reservas.”*

##### **4.3. Provide accruals without charging them in the PL (Akzo Nobel Coatings, 2010)**

*“Habiendo constituido una provisión equivalente al 50% de dichas actas por importe de 29.702 miles de euros. De acuerdo con principios y criterios contables de aplicación, la totalidad del importe debería haberse registrado como gasto del ejercicio al tratarse de un activo contingente. Así, al 31 de diciembre de 2010, los epígrafes de "deudores comerciales y otras cuentas a cobrar y de "acreedores comerciales y otras cuentas a pagar" del balance están sobrevalorados en 59.404 miles de euros y 29.702 miles de euros, respectivamente y la pérdida del ejercicio infravalorada.”*

##### **4.4. Not deferring revenue/expenses**

N/A

#### **5. Amortization tax criteria (Inovyn España SL, 2007)**

*“La sociedad amortiza el inmovilizado material de acuerdo con los coeficientes de amortización aprobados por el reglamento del impuesto sobre sociedades. En el supuesto de que se hubiese aplicado la vida útil económica estimada por el Grupo Solvay, al que la sociedad pertenece, el*  
*“Tal y como se indica en las notas 9 b) y 9.b) de la memoria de las cuentas anuales adjuntas, la sociedad mantiene clasificados a corto plazo créditos concedidos a empresas del grupo y asociadas por un importe de 168.917 miles de euros. Si bien dichos préstamos tienen vencimiento contractual a menos de un año, no hemos obtenido documentación que justifique, en base a la*

*capacidad de pago de dichas empresas del grupo deudoras, que los mencionados créditos serán realizados según su vencimiento contractual. En consecuencia, desconocernos el importe de los citados préstamos que debiera clasificarse a largo plazo, en su caso, por no esperarse su realización en el próximo ejercicio.”*

**6. Payment terms to suppliers (not included in the annual report) (Copisa, 2011)**

*“Tal y como se indica en las notas 9 b) y 9.b) de la memoria de las cuentas anuales adjuntas, la sociedad mantiene clasificados a corto plazo créditos concedidos a empresas del grupo y asociadas por un importe de 168.917 miles de euros. si bien dichos préstamos tienen vencimiento contractual a menos de un año, no hemos obtenido documentación que justifique, en base a la capacidad de pago de dichas empresas del grupo deudoras, que los mencionados créditos serán realizados según su vencimiento contractual. en consecuencia, desconocernos el importe de los citados préstamos que debiera clasificarse a largo plazo, en su caso, por no esperarse su realización en el próximo ejercicio.”*

**7. Tax matters (Essity Spain SLU, 2005)**

*“Tal y como se indica en la nota 8 de la memoria adjunta, la sociedad filial SCA Hygiene Paper España SL, como consecuencia de la inspección realizada por la agencia tributaria en relación con el impuesto sobre sociedades correspondiente al periodo impositivo de 1998, recibió en el ejercicio 2003 un acta por inspección, la cual fue firmada en disconformidad. Esta acta actualmente ha sido recurrida por la mencionada sociedad, no siendo posible determinar de forma objetiva el desenlace final de los recursos planteados ni, en consecuencia, el efecto que esta situación podría tener sobre el valor de la inversión financiera correspondiente a esta sociedad filial que figura registrada en el epígrafe de inmovilizaciones financieras del balance de situación adjunto.”*

**8. Others**

**8.1. Accounts receivable (Planeta de Agostini Formación SLU, 2008)**

*“El epígrafe "inversiones financieras a largo plazo" del activo del balance de situación adjunto incluye 4,1 millones de euros correspondientes a una cuenta a cobrar mantenida con la hacienda pública originada por la rectificación realizada por la sociedad en el ejercicio 2001 del tratamiento del IVA, cuya devolución fue denegada en primera instancia por la unidad regional de gestión de grandes empresas, habiéndose interpuesto desde entonces varias reclamaciones y recursos ante las instancias competentes para recuperar el importe solicitado en dicha rectificación. La recuperabilidad de la totalidad de la cuenta a cobrar se encuentra sujeta a la resolución favorable de estos recursos.”*

**8.2. Incorrect recognition of tax credits (Hydro Building Systems Spain, 2010)**

*“Como se detalla en la nota 19 de la memoria de las cuentas anuales adjunta, al 31 de diciembre de 2010 la sociedad tiene reconocidos créditos fiscales por importe de 7.448 miles de euros derivados de bases imponibles negativas pendientes de compensación fiscal. La recuperación de*

*dicho crédito está sujeta a la capacidad del grupo consolidado fiscal, al que pertenece la sociedad, de generar en los plazos previstos por la legislación vigente los beneficios fiscales suficientes para compensar dichas pérdidas.”*

### **8.3. Treasury stock**

N/A

### **8.4. Not including certain information (Euro Depot España, 2007)**

*“Omisión de información requerida por el artículo 200, indicación duodécima, de la LSA.”*

### **8.5. Interventions by certain official organisms not concluded (Schenker Logistics SAU, 2008)**

*“Según se explica en la nota 17.5 de la memoria, a finales del ejercicio 2008, la comisión nacional de la competencia inició actuaciones ante la sociedad. A la fecha de este informe, dichas actuaciones aún no han concluido, no pudiendo determinar su desenlace final.”*

### **8.6. Contentious-administrative jurisdiction (Inovyn España SL, 2006)**

*“La sociedad posee una participación del 65% en la sociedad Vinilis SA, la cual mantiene un contencioso desde 2006 con uno de sus principales proveedores de energía en relación al precio de este suministro a la fecha de emisión de este informe se desconoce el efecto definitivo que el desenlace de este contencioso tendrá sobre el patrimonio de la sociedad participado.”*

### **9. Emphasis paragraph (Comsa SA, 2011)**

*“Sin que afecte a nuestra opinión de auditoría, llamamos la atención respecto a lo indicado en las notas 1 y 8, la sociedad participa mayoritariamente en el capital social de ciertas empresas. La sociedad está dispensada de presentar cuentas anuales consolidadas por integrarse en las cuentas anuales del grupo de empresas dominadas por Comsa Emte SL, con la que la sociedad mantiene saldos financieros deudores y coordina sus políticas de gestión y dirección financiera y que a fecha actual se encuentra en proceso de renegociación sobre determinados aspectos de su endeudamiento corporativo.”*

**8.3. Appendix 3: Company selection by group**

Table 9. Company selection by group (Appendix 3)

GROUP A			GROUP B			GROUP C		
Company	CNAE Code	Auditor	Company	CNAE Code	Auditor	Company	CNAE Code	Auditor
Seat SA	2910	PWC	Essity Spain SLU	1722	PWC	Comsa SA	4122	Grant Thornton (2005-2006), Deloitte (2007-2011)
Bayer Hispania SL	2110	PWC	Havas Media Group Spain SAU	7311	EY (2005), Deloitte (2006-2011)	Grup Baucells Alimentació SL	1011	Fornes Salas y Asociados (2005-2007), BDO (2008-2010), Deloitte (2011)
Antonio Puig SA	2042	EY	Roche Diagnostics SL	4646	KPMG	Quimidroga SA	4675	Grant Thornton
Instituto Grifols SA	2110	KPMG	Euro Depot España SA	4752	PWC (2005-2009), Deloitte (2010-2011)	Grifols Movaco SA.	4646	KPMG
Affinity Petcare SA	1092	PWC	Distribuidores automáticos de bebidas y alimentos SA	4799	KPMG	Volkswagen Group España Distribucion SA	4511	PWC
Borges Agricultural & Industrial Edible Oils SAU	1043	PWC	Cuatrecasas Gonçalves Pereira SLP	6910	Grant Thornton	Henkel Iberica SA	2041	KPMG
Bioiberica SAU	2110	KPMG	Esteve Pharmaceutical S SA	2120	EY	Rhenus Logistics SA	5229	EY (2005-2007), Century Auditores S.L. (2008-2011)
Covestro SL.	2013	PWC	Codorniu SA	1102	Deloitte (2005, 2009-2011), BDO (2006-2008)	Schenker Logistics SAU	5229	Mazars (2005), Ball Consultors i Auditors SL (2006-2010), QS Audit Consultor (2011)
Grupo General Cable Sistemas SL	2732	Deloitte	Gallina Blanca SA	4639	Deloitte (2005-2010), PWC (2011)	Laboratorios Menarini SA	2120	PWC

Mahle Behr Spain SA	2932	EY	T-500 Puratos SA	2893	Deloitte	Penguin Random House Grupo Editorial SA.	5811	KPMG (2005-2010), PWC (2011)
Kostal Electrica SA	2790	EY (2005-2007), KPMG (2009-2011)	Fresenius Kabi España SA	2120	KPMG	DHL Parcel Barcelona Spain S.L.	4941	PWC
Elix Polymers SLU	2016	PWC	Hospital Sant Joan de Reus SA	8610	Faura-Casas Auditores Consultors SL	Laboratorios Grifols SA	2120	KPMG
Copisa Constructora Pirenaica SA	4211	Audigest SA (2005-2006) PWC (2007-2011)	Smith and Nephew SA	4646	EY	Vidrieria Rovira SL	2313	EY
Eurofred SA	4669	BDO (2005-2007), KPMG (2008-2011)	Industrias Titan SAU	2030	Auditglobal, S.L	Planeta de Agostini Formacion SLU	8531	Deloitte
Miguel Torres SA	1102	PWC	Inovyn España S.L.	2016	N/A	Nestle España SAU	1089	KPMG
Borges Agricultural & Industrial Nuts SA	1089	PWC	Industrias y Promociones Alimenticias SA	1084	Deloitte (2005-2010), PWC (2011)	Bureau Veritas Inspección y Testing SLU	7112	KPMG (2005-2006), PWC (2007-2011)
ITW España SA	7112	Deloitte	The GB Foods SA	4639	Deloitte (2005-2010), PWC (2011)	Hydro Building Systems Spain S.L.	4672	EY (2005), Deloitte (2006-2009), KPMG (2010-2011)
Akzo Nobel Coatings SLU	2030	EY (2005), KPMG (2006-2011)	Badalona Serveis Assistencials SA	8610	Faura-Casas Auditores Consultors SL	Laboratorios Inibsa SA	2110	Mazars (2005-2006), Deloitte (2007-2011)
FMC Foret SA	8211	KPMG	Duques de Bergara SL	5510	Quadras y Serra Auditores SL (2005), QS Audit Consultor S.L.P. (2006-2011)	Merit Automotive Electronics Systems SLU	2931	Deloitte (2005), EY (2006-2011)
Printer Industria Gráfica Newco SL	6820	PWC (2005, 2011), KPMG (2008-2010)	Prenatal SA	4719	EY	Gran Casino de Barcelona SL	9200	Audigest S.A. (2005-2010), Deloitte (2011)