


FACULTEIT ECONOMIE EN BEDRIJFSKUNDE

GHENT UNIVERSITY

FACULTY OF ECONOMICS AND BUSINESS ADMINISTRATION

ACADEMIC YEAR 2010 – 2011

Assessing assurance statements on CSR reports: the choice of assurance provider

Thesis submitted for the award of Master in Applied Economics

Sanne Tuybens

Under the guidance of

Prof. Dr. I. De Beelde

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Korte voorstelling van de thesis (in Dutch)

Sinds een tiental jaren is merkbaar dat het maatschappelijk bewustzijn van bedrijven groeit. Hieruit resulteren twee fenomenen: de publicatie van 'maatschappelijk verantwoord ondernemen' (MVO) rapporten en de controle/zekerheidsverschaffing voor deze rapporten. Laatstgenoemde is de basis voor deze thesis. De controle van MVO rapporten (de meeste gebruikte term is '*assurance*') bestaat uit een onafhankelijke zekerheidsverschaffer, de *assurance provider*, die de informatie in het rapport controleert naar zijn juistheid en accuraatheid, en een conclusie overhandigt aan het betrokken bedrijf, dat dit verslag publiceert in het MVO rapport in de vorm van een *assurance statement*. De zekerheidsverschaffer kan een auditeur zijn, analoog met zijn financiële auditopdrachten, maar ook tal van andere entiteiten. De afwezigheid van een algemeen aanvaarde werkwijze zorgt ervoor dat een verscheidenheid aan entiteiten deze opdracht kan vervullen. De verschillende potentiële zekerheidsverschaffers zijn het onderwerp van deze thesis.

Deel 1 van deze thesis verzamelt en analyseert alle informatie over de *assurance providers,* dat voorhanden is in academische en professionele bronnen. Drie belangrijke zekerheidsverschaffers worden dieper onderzocht: de auditeur, de consultant en de stakeholder. De verschillen in aard, werkmethode en kwaliteit worden uitvoerig bestudeerd. Deel 2 van deze thesis tracht de volgende vraag te beantwoorden: hoe kiest het betrokken bedrijf de gepaste zekerheidsverschaffer? Met name de vraag wordt gesteld of deze keuze kan voorspeld worden aan de hand van nationale, industriële en bedrijfsspecifieke eigenschappen van het betrokken bedrijf.

Deel 1 is gebaseerd op literair onderzoek, deel 2 zoekt een antwoord via statistisch onderzoek. De gebruikte steekproef is een combinatie van drie Europese *Sustainability indices*, waaruit 184 unieke bedrijven zijn geselecteerd op basis van hun gepubliceerde MVO rapport. In deze rapporten zijn 120 *assurance statements* gevonden. De invloed van volgende variabelen op de steekproef is onderzocht: sector, nationaliteit, grootte van het bedrijf, financiële toestand, eigendomsstructuur en de zichtbaarheid in de media. Drie statistische modellen zijn opgesteld. Het eerste model onderzoekt of deze variabelen ook een invloed hebben op de initiële keuze om zekerheid te vragen voor het MVO rapport. De twee andere modellen onderzoeken de keuze van zekerheidsverschaffer, op basis van een verschil tussen een Big4 auditbedrijf of een ander type, en op basis van een hiërarchie in kwaliteit van de *assurance provider* (in dalende orde van kwaliteit: auditeur, consultant, stakeholder, classificatieagentschap en geen zekerheidsverschaffer).

De belangrijkste resultaten zijn de volgende: Auditeurs vervullen de opdracht op een gestructureerde en voorzichtige manier die erg lijkt op de financiële auditmethoden. Consultants trachten vooral een toegevoegde waarde te creëren voor het betrokken bedrijf en zijn stakeholders, door hun visie en aanbevelingen op te sommen in het verslag. Stakeholders profileren zich in de vorm van panels en NGO's, maar hun (normatieve) werkmethoden worden bekritiseerd door onderzoekers. De verslagen van auditeurs worden beschouwd als van hoogste kwaliteit.

Als belangrijkste eigenschappen van het betrokken bedrijf (die de keuze van zekerheidsverschaffer bepalen) zijn nationaliteit en zichtbaarheid in de media geïdentificeerd. Verder besluit het onderzoek van deze thesis dat de internationale steekproeven, die tot nu toe door onderzoekers zijn gebruikt, niet representatief zijn voor Europa. Door de homogeniteit van Europa en de aandacht voor maatschappelijk verantwoord ondernemen, zijn de statistische resultaten van het onderzoek significant verschillend van het internationale onderzoek. Tenslotte kan geconcludeerd worden dat de werkmethoden en de kwaliteit van de verslaggeving van auditeurs en consultants aan het convergeren is. Duidelijke signalen hiervan zijn gevonden in de inhoudsanalyse van de steekproef en in de statistische conclusie.

Content

List of abbreviations

AA1000AS	AA1000 Assurance Standard
ACCA	Association of Chartered Certified Accountants
ADP	Aéroports de Paris
CPA	Certified Public Accountant
CSR	Corporate Social Responsibility
DJSI	Dow Jones Sustainability Index
EDF	Électricité de France
EMAS	EU Eco-Management and Audit Scheme
ENDS	Environmental Data Services
ETS	EU Emission Trading System
EU	European Union
FEE	Fédération des Experts Comptables Européens
FT500	Financial Times 500 (biggest companies)
FTSE	Financial Times Stock Exchange
G250	250 biggest companies globally
GRI	Global Reporting Initiative
IAASB	International Auditing and Assurance Standards Board
ICAEW	Institute of Chartered Accountants in England and Wales
ICB	Industry Classification Benchmark
IFAC	International Federation of Accountants
IPPC	Integrated Pollution Prevention and Control Directive
ISAE 3000	International Standard on Assurance Engagements (ISAE) 3000 Other Than Audits or Reviews of Historical Financial Information
ISEA	Institute of Social and Ethical Accountability
ISO	International Organization for Standardization
NCRI	National Corporate Responsibility Index
NGO	Non Governmental Organization
NIVRA	Koninklijk Nederlands Instituut van Registeraccountants
PRTR	European Pollutant Release and Transfer Register
ROA	Return on Assets
SAM	Sustainable Asset Management
SPSS	Statistical Package for the Social Sciences
TBL	Triple Bottom Line
UK	United Kingdom
US	United States

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Introduction

A growing trend in corporate society is the social and environmental consciousness of multinationals and other large companies. A survey by KPMG summarised the societal role of corporations for a sustainable future, by stating that: "companies could play a vital role by ensuring that the direct and indirect impacts caused in the normal course of business are positive for the environment and people, and by using their vast reserves of knowledge, innovation, creativity, and other resources to help find solutions to some of the social and environmental challenges we are facing as a global society today or in the future. This is known as corporate social responsibility" (KPMG, 2008, p. 8)

An increasing number of companies[1] are issuing social and environmental information as a disclosure in the annual report or in a special purpose report, the 'corporate social responsibility' or CSR report. A growing and innovative trend are the web-based CSR reports, as firstly noticed in 2004 (Owen & O'Dwyer, 2004; Adams & Evans, 2004; Kolk, 2005). Other concepts, used in the same context as CSR reports, are sustainability reports and 'Triple Bottom Line' (TBL) reports. Publishing a CSR report is a voluntary decision. According to Dando and Swift, the main reasons include "reputation enhancement, meeting investor demands for performance information and fulfilling a commitment to demonstrate an ethical position to stakeholders" (Dando & Swift, 2003, p. 150).

Following the trend in CSR reporting, external assurance of these reports by independent third parties has been rising (Owen & O'Dwyer, 2004). The output of the assurance process, the assurance statement, adds to the credibility of the CSR report and improves the stakeholder confidence in the reporting company. More than 650 assurance statements are produced in 2007 (Corporate Register, 2008), which is for 25% of the published CSR reports during that year. A growing market in CSR assurance services is detected by a variety of potential assurance providers. Auditors, consultants and even stakeholders offer their competences, knowledge and legitimacy to reporting companies in order to enhance the perceived quality of the CSR reports. This variety makes the choice of assurance provider not an obvious decision. The primary purpose of this thesis is to better understand how and which assurance provider the reporting company chooses.

The choice of assurance provider is investigated from two dimensions. The first part of this thesis, referred to as 'Part 1', attempts to identify and value the different types of assurance providers through an extensive literature review. Numerous researchers have 'touched' the subject of assurance providers, but

[1] In their survey about Corporate Social Responsibility reporting, KPMG stated that nearly 80 percent of the G250 companies issued CSR reports in 2008 (KPMG, 2008).

only few in a detailed manner. Researchers as Deegan, Cooper and Shelly (2006), Kolk and Perego (2008), Jones and Solomon (2010) and many other researchers focused on the assurance statements of CSR reports. A number of organizations studied the same research subject as well but more intensively (ENDS Directory, 2003; Corporate Register, 2008; CPA Australia, 2010). Both types of research provided merely figures about the appearance of assurance statements in their sample, or focus on one aspect of assurance statements, like stakeholder involvement (O'Dwyer & Owen, 2007). A number of researchers focused on assurance providers for statistical research purposes (Perego, 2009; Simnett, Vanstraelen, Chua, 2009) or to observe one type of assurance provider (Maltby, 1995; AccountAbility & Utopies, 2007). A considerable amount of knowledge about CSR assurance providers does exist so far, but is, as a consequence, widely spread over different research papers. The aim of Part 1 is to gather all information about CSR assurance providers and to highlight the differences between the types of assurance providers in a structured manner.

After revealing the variety in assurance providers, the second part of this thesis, referred to as 'Part 2', investigates how a reporting company chooses an CSR assurance provider. The second dimension of this thesis consequently starts from the perspective of the reporting company. The aim of Part 2 is to examine the choice of assurance provider from national, industrial and business characteristics of the reporting company by means of statistical research. Only two research papers have conducted this approach earlier (Perego, 2009; Simnett et al., 2009). Both documents examined the behaviour of choice on a global level, primarily focusing on national explanatory variables. This thesis attempts to specify these studies and to investigate the choice of assurance provider from a European perspective, to reduce the heterogeneity of a global sample. Besides the national explanatory variables, industrial and business variables are included in the research design to develop a more complete overview on the choice of assurance provider.

The remainder of the thesis is organised as follows. Part 1 gathers the published knowledge about assurance providers, that are issuing assurance statements on CSR reports. Differences in nature, approach en output are highlighted, the characteristics of a decent assurance provider are identified and a quality classification is established. Part 2 directs to the development of the empirical design and the results of the study about the choice of assurance provider. Additionally, the knowledge collected in Part 1 is conducted on the European sample to confirm or reject the previous research. After both parts, a discussion concludes the research on the assurance providers.

PART 1: The assurance providers

The research questions of Part 1 are formulated as follows: Which entities are providing assurance statements on the CSR reports of the reporting companies? What are the differences between the assurance providers in terms of nature, approach and output? Does a difference in quality exist between the types of assurance providers? This part of the thesis aims to gather all information on CSR assurance providers, which is available from previous research. Chapter 1 summarizes general information on assurance statements, and provides a theoretical framework as a comprehensive tool for the reasoning behind appointing an assurance provider. Chapter 2 consists of an extensive literary research on assurance providers. The following subjects are discussed successively: the different types of assurance providers, the characteristics of a decent assurance provider, the differences in approach (working methods and output) and the perceived classification in quality of the assurance providers. The most notable research papers on the mentioned topics are visualised in Figure 1.

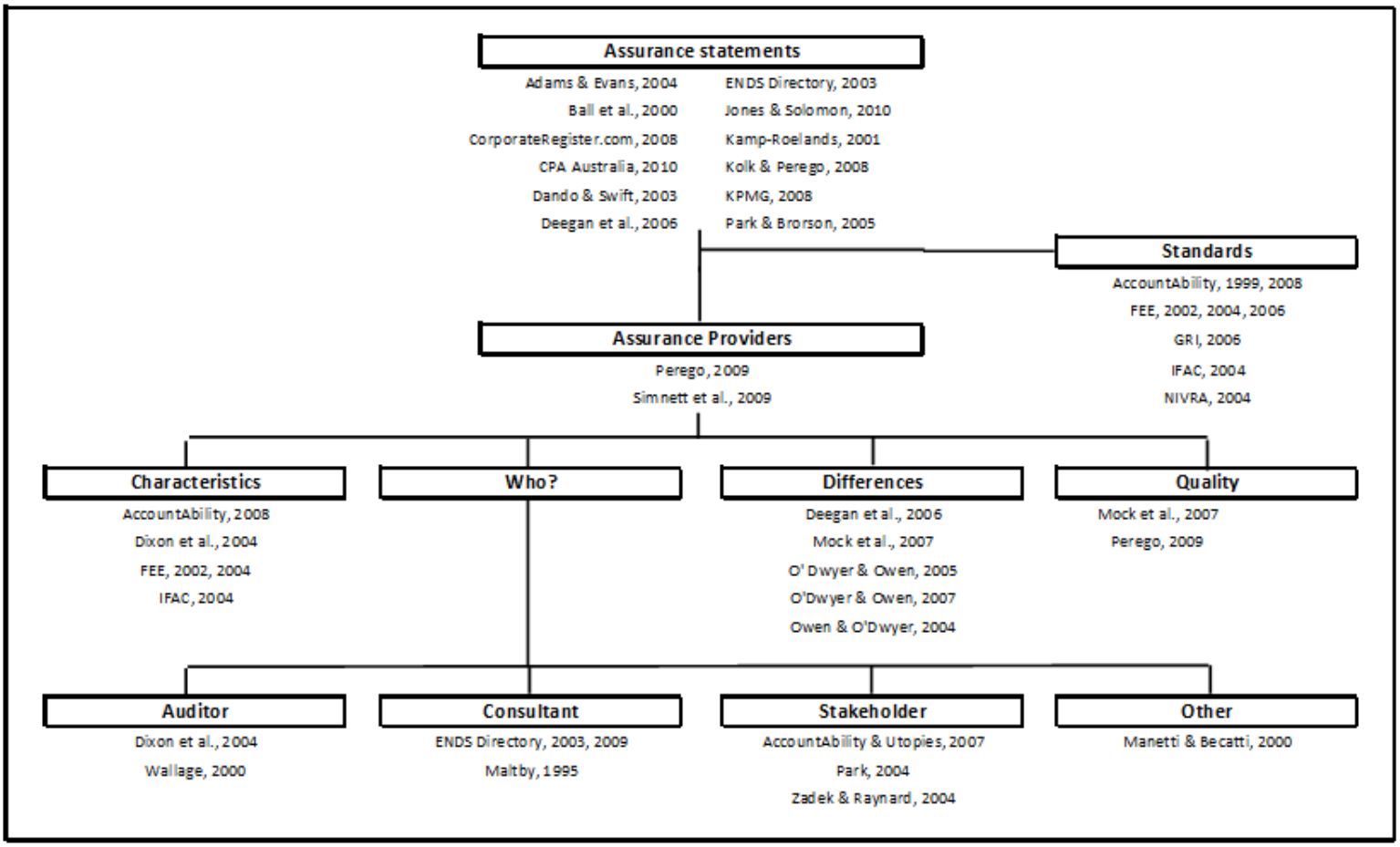

Figure 1: The most notable research papers covering the discussed subjects

1. Assurance statements

1.1 Defining assurance statements

Over more than a decade, stakeholders are demanding companies to give a true and fair representation of the triple bottom line information[2] in the issued Corporate Social Responsibility (CSR) reports (Gray & Milne, 2002; Owen & O'Dwyer, 2004; Park & Brorson, 2005). Following the practice of financial statement assurance, a trend in having CSR reports assured has been noticed, although this practice is still in the early stages of its evolution (Deegan, Cooper, Shelly, 2006). The assurance concept consists of an assurance provider, in collaboration with stakeholders or not, producing an assurance statement about the reliability and accurateness of the information disclosed in CSR reports. Park and Brorson (2005) presented this concept visually in figure 2.

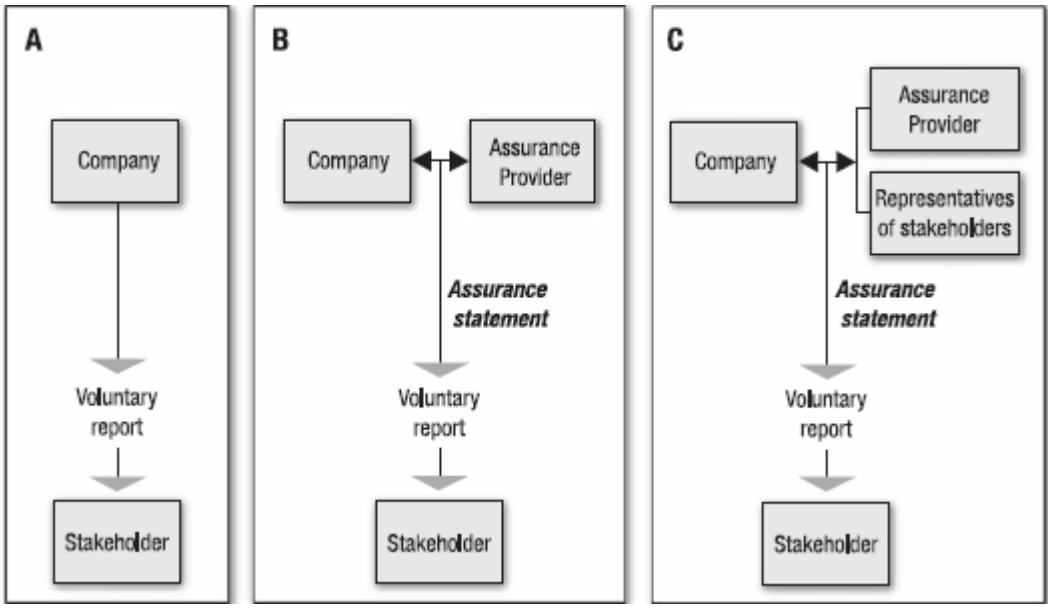

Figure 2: Three ways of interaction with the stakeholders: an unassured CSR report, an assured CSR report and an assured report with involvement of stakeholders (Park & Brorson, 2005, p. 1105).

An assurance engagement is generally defined as: "An engagement in which a practitioner expresses a conclusion designed to enhance the degree of confidence of the intended users other than the responsible party about the outcome of the evaluation of measurement of a subject matter against criteria" (IFAC, 2004, p. 7; Deegan et al., 2006, p. 332; Knechel, Wallage, Eilifsen, Van Praag, 2006, p. 146). The verification of CSR reports is not uniformly labelled. Concepts as 'audit', 'verification' or 'assurance' are used

[2] Triple bottom line (TBL) represents the idea that a business has, besides the goal to add economic value, also goals to add social and environmental value (Crane & Matten, 2004)

interchangeably, besides 'attestation', 'validation', 'review' and variations on these terms. The use of the terms 'verification' and 'audit' are questioned by different researchers (FEE, 2002; Park, 2004; Deegan et al., 2006; Corporate Register, 2008), stating that these could "create an expectations gap in which a user mistakenly assumes that there is more assurance than is actually present" (Deegan et al. 2006, p. 339). Assurance engagements on non-financial information, like CSR reports, cannot guarantee the same level of reliability as on the financial counterpart (Park, 2004), due to the nature of the data.

Corporate Register (2008), which collects and studies CSR reports (the organization's database contains over 17.000 CSR reports, which is estimated as 90-95 percent of the CSR market), stated that 650 assurance statements are included in CSR reports in 2007. The average annual growth amounts to 20 percent. According to KPMG (2008), 40 percent of the 250 largest companies world-wide (G250) are currently including a formal third party assurance statement in their CSR reports. These results follow the trend of a structural raise starting from 19 percent in 1999. The most significant region is Europe, with up to 30 percent of assured reports, compared to 7 percent in North-America (Corporate Register, 2008). When issuing the 2008 CSR Assurance Statement Report, Corporate Register has identified industries with more than average activity in sustainable assurance. Industries with the largest percentages of activity are 'Support Services' (30%), 'Telecommunications' (31%), 'Banks and Finance' (32%), 'Technology' (35%) and 'Insurance' (37%) (Corporate Register, 2008). The most frequently appointed assurance providers are accountants, verifying 40 percent of the market in 2007, followed by certification bodies (25%) and specialist consultancies (24%) (Corporate Register, 2008).

Assurance statements, like CSR reports, are in essence not mandatory. Companies voluntarily decide whether or not to assure the report and by who. A number of professional organisations provide direct and indirect guidance on the assurance process (O'Dwyer & Owen, 2007). Four major institutions are taking a leading role in supplying with standards and frameworks. Firstly, the Fédération des Experts Comptables Européens (FEE, 2002, 2004, 2006) issued discussion papers as a guidance for accountant assurors, while secondly, the Global Reporting Initiative provides a broad reporting framework, the Sustainability Reporting Guidelines Version 3.0 (GRI, 2006). Although the original AA1000 framework was also focused on the accountant assurors, the AA1000 Assurance Standard (AA1000AS) that was issued in 2003 and revised in 2008 by the Institute of Social and Ethical Accountability (ISEA), addressed as a third organisation the general assurance provider (AccountAbility, 1999, 2008). Lastly, the International Auditing and Assurance

Standards Board (IAASB) delivered a more general concept, providing a mandatory standard (ISAE 3000[3]) for accountant assurors on non-financial assurance engagements in general, not only on CSR reports (IFAC, 2004). All can be used complementarily and are specified in more detail in the next chapters, depending on the content. The different guidelines and standards are summarised in table 1. Despite these initiatives, no generally accepted approach to assure a CSR report has been established, resulting in a high variety of formats and approaches.

Organisation	**Framework or standard**	**Focus**
Fédération des Experts Comptables Européens (FEE)	Discussion papers : call for action	Accountant assurance providers
Global Reporting Initiative (GRI)	Sustainability reporting guidelines: version 3.0	All assurance providers
Institute of Social and Ethical Accountability (ISEA)	AA1000AS Assurance Standard (AA1000AS)	All assurance providers
International Auditing and Assurance standards Board (IAASB)	International Standard on Assurance Engagements (ISAE) 3000 Other Than Audits or Reviews of Historical Financial Information (ISAE3000)	Accountant assurance providers

Table 1: Frameworks and standards, applicable on assurance statements

Besides the international guidelines and standards, a number of national governments published guidelines for reporting and assurance, and simultaneously demanded increased transparency of triple bottom line (TBL) issues. As a leading European example, the Dutch Royal NIVRA[4] issued the full standard 3410N, guiding 'assurance engagements relating to sustainability reports' (NIVRA, 2004).

Concluding their research on the Association of Chartered Certified Accountants (ACCA) Sustainability Reporting Awards, Adams and Evans (2004) stated that completeness and credibility are the key criteria used by the judging panels. External assurance statements improve the external credibility and, by examining the internal control process, the internal credibility of the CSR information. To be considered completely, assurance statements have to provide the information that "stakeholders are legally or morally entitled to receive, even if the company chooses not to disclose all" (Adams & Evans, 2004, p. 105).

[3] The complete name of the standard is International Standard on Assurance Engagements (ISAE) 3000 Other Than Audits or Reviews of Historical Financial Information.
[4] The abbreviation of Royal NIVRA stands for Koninklijk Nederlands Instituut van Registeraccountants.

1.2 The reasoning behind assuring a CSR report

Why a company may choose to purchase assurance services is explained from the perspective of the agency theory (Ends directory, 2003; Kolk & Perego, 2008)[5]. The initial agency relationship is in this context defined as the reporting company (agent) and the stakeholder (principal). The reporting company is delegated by the stakeholder to create an economic and societal value and obtains the right to use the natural and social resources of the stakeholder. The agency theory generally stated that an agency problem arises when the cooperating parties have different goals and different attitudes towards risk (Eisenhardt, 1989). Stakeholders have no immediate access to the information about the performance of the reporting company. To reduce this agency asymmetry, the corporate management or the stakeholders appoint an assurance provider to assure that reliable and accurate sustainability information is released to the stakeholders. The stakeholder can verify the legitimacy of the reporting company's performance with this information and acts in accordance with this outcome. The projection of the agency theory on CSR assurance engagements is visualised in figure 3.

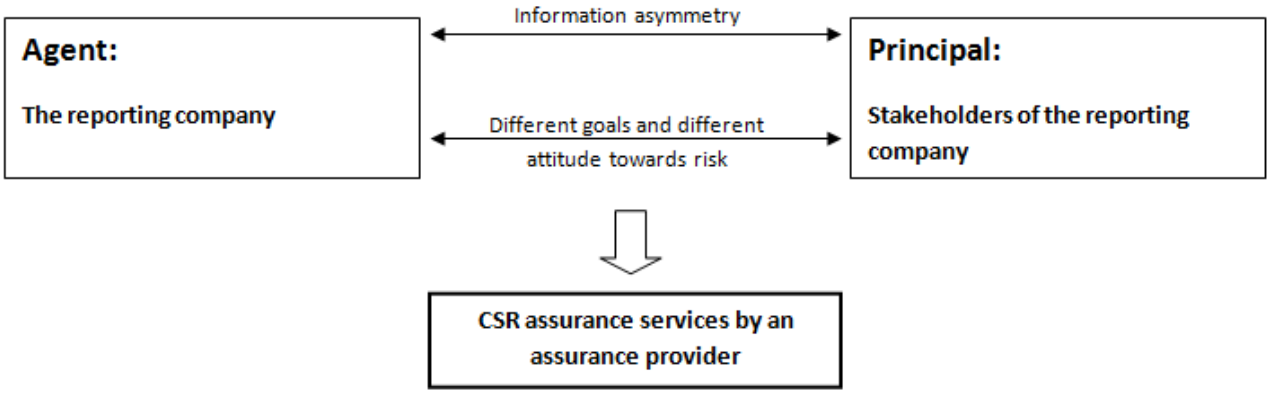

Figure 3: The agency theory, projected on the need for CSR assurance statements

From the agency theory, an assurance statement reduces the information asymmetry and the associated agency costs (Kolk & Perego, 2008), which is consistent with the reasoning of previous research papers. Various researchers indicated that the main arguments are the improved credibility (O'Dwyer & Owen,

[5] Although the perceived appropriateness of the theory because of its name, the stakeholder theory is rarely used to interpret the motivation behind publishing CSR assurance statements. The stakeholder theory stated that companies have an obligation and responsibility to the stakeholders (which are "any group or individual who can affect or is affected by the achievement of a corporation's purpose" (Freeman, 1984, p. 46)) and not only to the shareholders. A company can attract and maintain the support of their stakeholders by periodically publishing information on environmental, social and economic performance (Sweeney & Coughlan, 2008). The motivation behind the publication of CSR reports can therefore be explained by ways of this theory, but the stakeholder theory is less relevant for explaining the motivation behind the issuance of assurance statements on these reports.

2005; KPMG, 2008; Simnett, Vanstraelen, Chua, 2009; CPA Australia, 2010) and transparency (O'Dwyer & Owen, 2005; Jones & Solomon, 2010) of the reported CSR information. Assurance has also the potential to improve the quality of the reports (CPA Australia, 2010; KPMG, 2008; O'Dwyer & Owen, 2005; Jones & Solomon, 2010) and the underlying reporting process (KPMG, 2008; CPA Australia, 2010). Simnett et al. (2009) pointed out that "the effectiveness of achieving these desired outcomes hinges on the perceived and actual credibility of the information provided" (Simnett et al., 2009, p. 940). Corporate Register (2008) provided a check list for companies to decide whether an assurance statement is appropriate or not. The check list is inserted in this thesis as table 2.

Corporate Register's 10 quick checks for reporters:

Report Credibility

- What do our report readers think about our company and sector?
- Is this supported by stakeholder research? What do our advisors say?
- How credible will our report be without external assurance?
- Do our peers use external assurance?

Internal Management

- How robust are our systems for generating reliable report content?
- Will our underlying processes stand up to examination?
- Would they benefit from an assuror's feedback?

Final Report Check

- Do we have the staff to check the entire report for consistency and human error?
- Would having professional qualified assurors help improve report quality?

Sounding Board

- Can we see ourselves as others see us? Do we need to?

Table 2: Check lists to decide whether or not to assure a CSR report (Corporate Register, 2008, p. 11)

Counterarguments are the increased costs, the operational difficulties and the lack of commonly agreed standards (Jones & Solomon, 2010; Mock, Strohm, Swartz, 2007). The last counterargument subsequently results in the fact that the presence of an assurance statement does not mean that the scope and the quality of the assurance process is comparable (Corporate Register, 2008).

According to Dando and Swift (2003), the confidence of the stakeholders is not increasing proportionally with the growth in assurance. Two assurance side effects are largely examined by researchers: managerial

capture (Ball, Owen, Gray, 2000; Owen, Swift, Humphrey, Bowerman, 2000; Dando & Swift, 2003; Park, 2004; Adams & Evans, 2004; Smith, 2010) and professional capture (Power, 1991; Smith, Haniffa, Fairbrass, 2010). The former concerns the critique that the assurance provider is appointed by the management (the agent in the agency theory) instead of the stakeholders (the principal in the agency theory), by which the management has control over the published information and the independence of the assurance provider (Ball et al., 2000). By this, the scope of the assurance process and the output could be distorted, resulting in a decrease of credibility and transparency to the stakeholders. Professional capture deals with the appropriateness of different assurance providers and is discussed in the next chapter (infra, p. 14). Mock et al. (2007) highlighted however that the absence of an assurance statement simply makes an advertisement for the company of a CSR report.

1.3 The assurance process: approach and output

Before demonstrating the differences in approach between the assurance providers, a number of researchers provided information on the general CSR assurance process. Kamp-Roelands (2004) presented four phases in the process: the exploration phase, the inspection phase, the verification phase and the presentation. Park (2004) disclosed an example of a timeline for assuring a CSR report (Appendix A), including the steps 'planning', 'background work', 'interrogation of the database', 'examination of the draft report' and 'feedback meeting'. Both Deegan et al. (2006) and O'dwyer and Owen (2005, 2007) examined the assurance procedures that are described in the assurance statements. Deegan et al. (2006) listed a full range of identified procedures, the most important ones are confirmed by O'Dwyer and Owen (2005, 2007), supplemented with percentages of appearance: validation of data in report (92%), validation of data collection systems (92%), validation of achievement of targets (23%), site visits (54%), staff interviews (77%) and stakeholder interviews (23%).

Mock et al. (2007) and Corporate Register (2008) in particular investigated the 'ideal' assurance statement. Mock et al. (2007) discovered in their research that assurance statements frequently contain data on the used procedures. Interestingly to notice, this it is not the case for financial statements audits, which normally use the general statement: "sufficient, competent evidence is obtained" (Mock et al., 2007, p.71). Corporate Register (2008) explained that, because of the absence of a generally agreed approach, assurance providers need to define the scope and approach of their assurance process to guarantee an uniform interpretation by the readers.

The GRI reporting criteria and standards ISAE3000 and AA1000AS are used to formulate an assurance statement. The GRI guidelines are intended to guide the reporting companies, but are frequently used by

assurance providers. A reporting company can reflect its performance against the GRI reporting criteria and label itself the A, A+, B, B+, C, C+ GRI label check, or can ask GRI to check their performances[6]. Assurance providers can evaluate the company's performance against these reporting criteria to provide an objective assurance statement. Corporate Register (2008) concluded that the GRI guidelines are mostly referenced in the statements (in 44 percent of the assurance statements), followed by ISAE3000 (37%) and AA1000AS (20%). Interestingly, the standard ISAE 3000, although established to support the auditing profession, is also used by non-auditor assurance providers.

Corporate Register (2008) further stated that specific types of information are useful to include in the assurance statement. The intended audience of the statement should be the stakeholders. The assurance statements are, however, rarely addressed (in only 20 percent of the cases) and most frequently to the company's management (16%). 28 percent of the assurance statements include a disclaimer declaration to shift the responsibility onto the users of the assurance statement. Such disclaimer can advise not to rely on the statement to make financial decisions about the reporting company. Furthermore, a declaration of independence of the assurance provider is included in 54 percent of the assurance statements[7]. Lastly, the statement provides a clear distinction between the responsibilities of each party involved, the reporting company and the assurance provider (Corporate Register.com, 2008).

An assurance statement is concluded positively or negatively. In terms of audit concepts, a positive conclusion corresponds to a reasonable level of assurance, a negative conclusion with a moderate level of assurance. A 'moderate level of assurance' indicates that the assurance process is limited in scope in comparison to the reasonable level used in financial audit. Reasons for this difference are the difficulty of examining the qualitative data, the insufficient development of a company's internal system or just a cost/benefit decision by the company (Corporate Register, 2008). According to Corporate Register (2008), a positive conclusion is more beneficial to the average reader in terms of meeting the expectations and building trust.

Additionally, 53 percent of the assurance statements disclose recommendations to the reporting company. Previous research disagree on the appropriateness of this phenomenon. Providing recommendations can be problematic, as the assurance provider diverges from the focus to 'hold the company accounted' to being more a management tool (supra, p.9) (Owen & O'Dwyer, 2004). GRI (2006) stated that recommendations

[6] The rank 'A+ GRI checked' means that the company is in compliance with the GRI reporting criteria, an assurance service is provided by an external assurance provider and the content of the report is checked by GRI (Manetti & Becatti, 2009).

[7] More information about the independence of an assurance provider is included in chapter 2.2. (infra, p. 17).

for improvements should be reported separately to the management or to the board of directors. Zadek and Raynard (2004) concluded, however, that recommendations can satisfy stakeholders that the company can be trusted in terms of sustainability. Mock et al. (2007) suggested that companies need feedback, because of the age of sustainability reporting. He concluded that the provision of recommendations is associated with a higher quality assurance, which is statistically confirmed by Perego (2009).

In order to support assurance providers in the development of an assurance statement, Corporate Register (2008) provided an example of a 'best practice' assurance statement, which is disclosed in Appendix B.

2. Assurance providers

Besides the choice whether or not to assure the CSR report, companies carefully choose an assurance provider, which is "a person or an organisation who is and can be seen to be independent of the organisation being audited and is in a position to challenge and question the organization's approach" (AccountAbility, 1999, p. 48). According to KPMG's survey (2008), the Big4 audit firms are the leading providers of assurance on CSR reporting. In total, Corporate Register (2008) identified 350 different assurance providers that produced an assurance statement during 2007.

The relationship between the assurance provider and the reporting company is more stable in a CSR assurance contract than in a financial contract. Park (2004) concluded that the complex nature of a company, and even its industrial branch, requires more time for assurance providers to get acquainted with. The alternatives for external assurance are mainly internally driven: control by the functional areas, risk assessment and assurance by an internal audit team, and supervision by the board of directors or an audit committee (Zadek & Raynard, 2004).

2.1 Types of assurance providers

As assurance statements on CSR reports are still voluntary, no specific requirements concerning the nature of the assurance provider have been issued yet, resulting in a variety of entities offering sustainability assurance services (Deegan et al., 2006). The most frequently identified assuror is the traditional audit firm, whether this description is general (Deegan et al., 2006; Zadek & Raynard, 2004; KPMG, 2008) or distinguishing between Big4 audit firms and other assurance providers (hereafter referred to as 'Non-Big4') (ENDS Directory, 2003; Corporate Register, 2008; Perego, 2009). A wide variety of consultants are also offering sustainability services for an increasing number of demanding companies. The previous research distinguished between environmental consultants, environmental and engineering consultants, management systems and certification consultants, and social and ethical performance consultants (Deegan et al., 2006), and between broader consultants and specialist CSR consultants (Corporate Register, 2008; Perego, 2009; Zadek & Raynard, 2004). Stakeholders can be the assurance providers themselves, represented by government bodies (Corporate Register, 2008), NGOs (ENDS Directory, 2003; Zadek & Raynard, 2004; Corporate Register, 2008), civil society assurors, opinion leaders and stakeholder panels (Zadek & Raynard, 2004; AccountAbility & Utopies, 2007). Minor assurance is provided by certification bodies (KPMG, 2008; Corporate Register, 2008; Perego, 2009), although being more a confirmation than an actual assurance. Different levels of confidence are derived from the different assurance providers (AccountAbility, 1999).

Besides these four broad categories of assurance providers, other tools to communicate about the reporting company's performance to the stakeholders are detected. Ratings, rankings and indices attempt to visualise a company's performance to make the information accessible for every stakeholder, whatever his knowledge on the field. These visual disclosures in the reports range from detailed graphs to just the mentioning of the name. The European Commission (2011a) stated that stakeholders are increasingly relying on these 'visual confirmations' to make organisational decisions. Rating agencies tend to go a step further, and report on the used rating criteria and the company's performance besides the visual disclosure in the CSR report. A leading example of a rating agency is Vigeo ratings. Examples of rankings and indices are The Dow Jones Sustainability Indices and the FTSE4GOOD Index series.

According to KPMG's triennial survey (2008), 70 percent of the assurance statements of the G250 companies are assured by audit firms, 13 percent by certification bodies and 17 percent by consultants. In 67 cases, a form of stakeholder involvement is recognized. Corporate Register (2008) reported significantly other numbers covering the whole CSR market, stating that 40 percent of the market is assured by audit firms, 25 percent by certification bodies, 27 percent by consultants and 3 percent by stakeholders. The organization recognized, however, that for big firms (in this case companies of the Global FT500), the percentage of auditors' assurance statements is 56.

The remainder of this chapter explains the differentiation of the assuring entities in nature, working method/output and quality. Certification bodies are not described in further detail both in previous research and in this thesis, because of the lack in factual assurance statements. Certifications are mentioned in the CSR reports, but no further details are given.

2.1.1 Financial auditors

When analyzing the Corporate Social Responsibility market, KPMG (2008) concluded that 70 percent of the assurance statements are issued by audit firms. The arguments for appointing an auditor are numerous. Dixon, Mousa and Woodhead (2004) stated that the basic principles of financial auditing (the understanding of the design of internal control and accounting systems, the measurement and verification techniques,…) are required for the CSR assurance process, indicating the importance of an audit profile. The independence and credibility of auditors are perceived by companies as more reliable than other specialists (Dixon et al., 2004). Dixon et al. (2004) demonstrated their preferences for an auditor assurance provider by adding an extensive framework of characteristics that makes an auditor the most suitable assurance provider[8]. The Institute of Chartered Accountants in England and Wales (ICAEW) Environmental Research Group (2000)

[8] The framework of Dixon et al. (2004) is disclosed in Appendix C (Dixon et al., 2004, p. 133).

called attention to the scope of the financial audit work performed: the impact of environmental issues has already been noticed in the financial statements in relation to provisions, contingent liabilities, asset values,… and can more easily be extended to the CSR report.

Mock et al. (2007), Perego (2009) and Simnett et al. (2009) classified auditors, and especially Big4 audit firms[9], as high quality assurance providers, because the profession has "well-developed 'global' standards, a body of ethics and independence requirements, as well as quality-control mechanisms at both the firm and engagement levels that help ensure that the assurance provided is of consistently high quality" (Simnett et al., 2009, p. 941). Big4 audit firms in particular have a greater stake in maintaining the reputation and the integrity of the firm's name, which is perceived by the public in terms of higher competency and legitimacy (Simnett et al., 2009). The legitimacy of this valuation is discussed in chapter 2.4.

The drawbacks of a traditional assuror are linked with the ability to execute to the fullest a CSR assurance process, both in competence (Dixon et al., 2004) and integrity (ENDS Directory, 2003). As explained by FEE (2004), auditors are experts in matters related to accountancy, but their expertise is questionable in case of CSR reports. The high confidence in auditors, despite of the poor subject expertise, is described as professional capture (Power, 1991). Big4 audit firms, opposed to the small audit firms, have professionals in every specialization (CSR knowledge included) within the organization, resulting in sufficient capability to provide the required assurance statement (FEE, 2004). The cost of contracting a financial auditor is significantly higher than other assurance providers, but is less relevant when choosing an assurance provider (infra, p. 22).

2.1.2 Consultants

Besides financial auditors, a growing market trend is assurance by consultants. The UK Environmental Data Services (ENDS) directory lists 225 environmental consultancy firms[10], including a wide variety of specializations. CSR is one of the broad activities the consultants offer to business and government, although specialist CSR consultants do exist (Maltby, 1995).

Consultancy does not have a common culture like the audit industry, because of the variety of specialists and a lack of regulatory forces and shared background (Maltby, 1995). ENDS Directory (2009) provided, besides full information on social and environmental consultants in the UK, the tools to choose the most

[9] Big4 firms consist of Deloitte, KPMG, PwC and Ernst&Young.

[10] Simnett et al. (2009) listed the most frequently assuring consultancy firms: Environmental Resources Management (ERM), URS, SGS, CSR Network, Bureau Veritas and Corporate Citizen Coy. The appointed consultants range from global networks to local assurors with varying qualifications (Simnett et al., 2009).

appropriate consultant. An important factor is 'accreditation', for which the directory provides a list of organizations that have developed assessor schemes for quality accreditation.

ENDS directory (2003) called attention to the quality of assurance statements by consultants, because they "express opinion on strengths and weaknesses of systems and processes, draw conclusions about the reports scope and also present recommendations" (ENDS directory, 2003, p. 4). Contrarily to auditors, consultants possess a higher level of expertise on the content of CSR reports (Simnett et al., 2009). Opposite to this view, Ball et al. (2000) worried that a CSR assurance market monopolised by consultants may result in a properly public relations medium (managerial capture).

2.1.3 Stakeholders

Although KPMG (2008) identified only 27 percent of the G250 companies as publishing stakeholder-initiated assurance statements, increasing attention is attracted towards stakeholder engagement. The Global Reporting Initiative (2006) described stakeholders as "entities or individuals that can reasonably be expected to be significantly affected by the organization's activities, products, and/or services; and whose actions can reasonably be expected to affect the ability of the organization to successfully implement its strategies and achieve its objectives" (GRI, 2006, p. 11). Cooperation with stakeholders can serve as a tool to understand and react on their expectations and interests (GRI, 2006).

Park (2004) identified four different forms of stakeholder engagement in the assurance process, the first consists of actively listening to their opinions. When the assurance process and the demands of the stakeholders increase in complexity, combining the formal CSR assurance process with stakeholder communication could provide the desired level of agreement on the reported content (KPMG, 2008). KPMG (2008) listed the mostly used activities of stakeholder communication: round tables / dialogues (44%), ad hoc communications (38%) and questionnaires (36%).

The second category is the appointment of an independent experts as an assurance provider. Such assurance providers are categorised as opinion leaders or 'famous faces', i.e. internationally renowned individuals based on their expertise. Opinion leaders are appointed to give an opinion on the reliability and relevance of the published information, in the absence of an objective assurance by a 'true' assurance provider (Manetti & Becatti, 2009). Corporate Register (2008) stated that the advantage of building trust with the stakeholders does not offset the disadvantages. An opinion leader, perceived as a low cost option, is more likely to provide an overview of the issues reported, instead of evaluating the accurateness of this

information. Zadek and Raynard (2004) provided examples of such opinion leaders (mostly celebrities, representatives of NGOs or academics), one being Jonathon Porritt of The Natural Step.

Thirdly, the gathering of an independent stakeholder panel is a widely investigated topic in the scientific literature (Park, 2004). Stakeholder panels, or 'Report Review Committees', are established for debating on difficult and emerging issues, overseeing the report and providing public assurance (AccountAbility & Utopies, 2007). AccountAbility and Utopies (2007) wrote a report on the emerging role of stakeholder panels. They identified that the size and background of the members vary considerably: a panel needs to be a reflection of the range and the impact of the stakeholders. Members range from experts and academics to global unions and consumer associations. Difficulties arising from stakeholder panels are "the lack of real influence, the difficulty in bridging stakeholder concerns and corporate priorities, the difficulty in finding the right balance between representation and expertise and the difference of opinion on the role of the panel" (AccountAbility & Utopies, 2007, p. 30). Corporate Register (2008) stated that a stakeholder panel cannot provide 'true assurance'. Examples of companies that appoint a stakeholder panel are Royal Dutch Shell, EDF and ADP.

The highest degree of stakeholder engagement is the appointment of a NGO as an assurance provider (Park, 2004), although general agreement is made that NGOs should collaborate with a previously mentioned assurance provider in the assurance process (ENDS directory, 2003). This form of stakeholder engagement is valuable for the other stakeholders, because NGOs express an opinion on the company's performance in CSR evolvement. Park (2004) formulated the drawbacks of the assurance by NGOs, including a lack of technical expertise and insights in corporate affairs, the narrow range of vision to cover the interests of all stakeholders, the perceived trustworthiness by all stakeholders and the threat to their task as alarm watch in the society. Examples of NGOs providing assurance services are The Natural Step, Rainforest Alliance and Business Leaders Forum (ENDS Directory, 2003).

2.1.4 Use of experts

As every consultant, auditor or other assurance provider is an expert in his field of knowledge, international standards recognize the fact that assurance providers are seeking advice from independent experts in particular situations. Manetti and Becatti (2008) gave as reasons: "the difficulty in evaluating the environmental impact of company policy, the impossibility of evaluating the real level of involvement of stakeholders in the reporting process and the prevalence of information of a qualitative / descriptive character in the report" (Manetti & Becatti, 2008, p. 291). Deegan et al (2006) emphasized that the use of experts, and the reporting of this information, can increase the credibility and value of assurance

statements. Big4 firms do have the required social and environmental expertise within the company, opposite to the possible perception of the stakeholders. Deegan et al. (2006) suggested that it is useful for Big4 firms to note the relevant expertise in the assurance statement.

ISAE 3000 stated that "when the work of an expert is used in the collection and evaluation of evidence, the practitioner and the expert should, on a combined basis, possess adequate skill and knowledge regarding the subject matter and the criteria for the practitioner to determine that sufficient appropriate evidence has been obtained" (IFAC, 2004, 1052). The initial assurance provider has to obtain sufficient evidence confirming the adequacy of the expert's work (IFAC, 2004), particularly the expert's professional competencies (FEE, 2006). The final responsibility of the assurance process is a fragile issue, extensively described in international standards. FEE (2006) provided three possibilities for dealing with responsibility[11]: the initial assurance provider bears undivided responsibility, joint responsibility for the 'multidisciplinary team' and separate engagements for assurance provider and experts. FEE prefers the first and the third possibility (FEE, 2006).

Deegan et al. (2006), when investigating assurance statements on CSR reports, concluded that the majority of assurance statements do not indicate the involvement of experts, although they might be used. The paper raises the question whether stakeholders should be informed about the involvement.

2.2 Characteristics of a decent assurance provider

Previous research all agreed that one crucial characteristic is a requirement to even talk about assurance, namely the independence of the assurance provider. FEE (2002) described two threats to independence: substantial other (audit or non-audit) fees from the company and consultancy work performed for the company. The appropriate degree of independence has to result in providing an adverse opinion when the CSR report is incomplete or distorted (O'Dwyer & Owen, 2007). Stakeholders are concerned with visible independence, a considerable lack may raise the suspicion about managerial capture (supra, p.9). O'Dwyer and Owen (2007) suggested that the assurance provider has to be appointed and judged by stakeholders, instead of the management. AccountAbility (1999) emphasized the importance of legitimacy with the stakeholders when assuring a company's CSR report.

Professional competencies are described in different dimensions in previous research papers. ISAE 3000 generally stated that "the practitioner should accept (or continue where applicable) an assurance engagement only if the practitioner is satisfied that those persons who are to perform the engagement

[11] The possibilities are inspired by the Dutch standard for assurance engagements 3410 (NIVRA, 2004).

collectively possess the necessary professional competencies" (IFAC, 2004, p. 1047). Specialized knowledge and skills may be required, but not attainable for every assurance provider. Additionally, the capacity to perform the assurance process influences the quality of the output (FEE, 2004). Zadek (2004) concluded that general assurance competencies, content competencies and process competencies are necessary to fulfil an assurance engagement. ISEA (AccountAbility, 1999) provided a general framework in the revised standard AA1000AS with the required competences that an assurance provider must posses. When selecting an assurance provider, the company has to consider the competences in the categories 'administrative requirements', 'organizational profile', 'technical competence and capacity' and 'cost implications' (AccountAbility, 2008)[12].

One unconventional characteristic is noticed by Owen & O'Dwyer (2004). Indicating that a CSR report is assured by a 'respected' assurance provider, already meets the stakeholders' needs for credible information sufficiently in a number of detected cases, regardless of the content of the assurance statement (Owen & O'Dwyer, 2004).

2.3 Differences in approach: working method and output

The European organization FEE (2002) identified three different approaches for providing assurance on CSR information[13]. The accountancy approach generally concerns the application of financial statement assurance methods, focusing on the verification of reliable information. This method is mostly adopted by the traditional audit firms. Following the social audit approach, the 'social assuror' reports independently to the stakeholder, not to the company. The consultancy approach is more an external service to the company, providing advice and assistance for improving the sustainability processes (FEE, 2002). The three approaches are currently used interchangeably, by all assurance providers, or used in a converged way as the 'comprehensive approach' (FEE, 2002).

As generally agreed by different researchers, auditors tend to adopt a structured (Park, 2004) and cautious (Owen & O'Dwyer, 2004; O'Dwyer & Owen, 2005; Deegan et al., 2006) approach when assuring CSR reports, to protect the independence and integrity of the firm's name. The auditor focuses on the analysis of risk, the collection of evidence (Park, 2004) and the consistency of information within the report (Owen & O'Dwyer, 2004). A notion of the completeness of information provided is generally lacking in the assurance statement (only in 27 percent of the cases, investigated by Owen and O'Dwyer (2004)), suggesting that the

[12] The research paper provided more detailed criteria on competencies (AccountAbility, 2008, p. 24-25).

[13] FEE called attention to the supplementary concept of the approaches: "approaches are all important to sustainability reporting. They are not competing methodologies. The differences arise for historical reasons and are most apparent in the nature of the assurance provider and the areas of information within the scope of the report" (FEE, 2002, p. 18).

auditor does not investigate beyond the scope of the CSR report. The phrase 'true and fair' is omitted from the assurance statement in a lot of cases (Owen and O'Dwyer (2004) did not provide quantitative evidence).

Opposite to the financial audit services, the auditor assurance provider tends to conclude an assurance statement with a lower level of assurance (Corporate Register, 2008). Corporate Register (2008) discovered that 83% of the assurance statements made by auditors are concluded with a moderate level of assurance (supra, p. 10). According to Mock et al. (2007), this level of assurance might be explained by the firms' portfolio of particularly large clients. It may be more difficult for the assurance provider to acquire all needed industry expertise. Additionally, the unregulated aspect of CSR reporting makes it more difficult and risky to assure large and more complex clients (Mock et al., 2007).

Consultants generally adopt a strategic (O'Dwyer & Owen, 2007) and evaluative (O'Dwyer & Owen, 2004) approach, but this approach varies among the different consultants (Park, 2004). The consultant provides praise and recommendations on the company's internal systems and performance as an added value for the company and its stakeholders (Owen & O'Dwyer, 2004; Park, 2004; O'Dwyer & Owen, 2007). Lastly and contrarily to the auditor, the consultant focuses more on the completeness, fairness and overall balance of the assurance statement (O'Dwyer & Owen, 2007).

The approach of the stakeholder assurance provider is not investigated widely. Park (2004) warned for the normative approach of NGOs that could endanger the neutral function of an assurance provider. Zadek and Raynard (2004) also emphasized that stakeholder assurance providers adopt a more normative and prescriptive approach than focusing on performance analysis.

Owen and O'Dwyer (2004, 2005, 2007) and Deegan et al. (2006) investigated the appearance of specific information in the assurance statements. Owen and O'Dwyer (2005) provided a framework against which the content of the assurance statements is investigated[14]. This framework is also used by Deegan et al. (2006). The researchers found differences in output between auditors and consultants concerning the addressee of the assurance statements, the independence of the assurance provider and the scope of the assurance process. According to Deegan et al. (2006) and O'Dwyer and Owen (2007), auditors tend to more frequently address the assurance statement, however more to the management than to the stakeholder, and describe explicitly the limitations of the scope. Additionally, O'Dwyer and Owen (2007) identified a reference to the independence in 63 percent of the consultant statements comparing to 46 percent of the auditor statements. As mentioned in the previous paragraphs, auditors provide significantly lower levels of

[14] The framework by Owen & O'Dwyer (2005) is provided in Appendix D.

assurance (negative assurance) and avoid the terms 'true and fair' in comparison with consultants (O'Dwyer & Owen, 2007). This is the same case for information on completeness, responsiveness and materiality (O'Dwyer & Owen, 2007).

The descriptive analysis described in the paragraph above, is confirmed with bivariate associations performed by Mock et al. (2007). They concluded that a Big4 audit firm as assurance provider correlated negatively with providing positive assurance and with whether recommendations are provided. A Big4 audit firm is positively associated with whether the usage of the assurance report is restricted by a disclaimer declaration. The founded differences are again confirmed by a binary logistic regression (Mock et al., 2007).

2.4 Quality hierarchy of the assurance provider

Perego (2009) and Mock et al. (2007) identified the assurance statements by the traditional audit (Big 4) firms as of highest quality, followed by consultants. Perego (2009) indicated the size of the firm as primary reason, explaining that a Big4 audit firm is not dependent of a single client (fee dependency) and has a large base of expertise within the company. The output quality of the Big4 is also subject to internal mechanisms of control to protect the reputation of the firm. The other reasons described in chapter 2.1.1, can be added to the argumentation of Perego (2009). The conclusions of Mock et al. (2007) and Perego (2009) are based on different research methods.

Mock et al. (2007) applied multivariate statistics (Pearson correlation and logistic regression) on a sample of 130 companies with an auditor or consultant as assurance provider, to identify the relationship between the appointment of a Big4 assurance provider and a 'good' assurance statement. They described as the main characteristics of a quality assurance statement: the assurance of all categories (environmental, social and economic indicators), the assurance of both qualitative and quantitative data, the used symbols, the notion of restricted usage, the provided recommendations, the disclosure of the used procedures and the disclosure of the used framework. The majority of the characteristics are negatively associated with a positive or reasonable level of assurance. This means that a negative or moderate level of assurance is concluded as of highest quality. The provision of recommendations is positively associated with a quality assurance. As previously described however, there has been considerable discussion about the appropriateness of recommendations in assurance statements (supra, p.10). A quality assurance output is highly significantly related to the Big4 auditor, as the auditor is also significantly associated with the characteristics of a quality assurance statement, by which Mock et al. (2007) concluded that a Big4 auditor produced the assurance statements of the highest quality.

Perego (2009) used the evaluative framework of O'Dwyer and Owen (2005)[15] and identified three categories of assurance quality: reporting format, assurance procedures and recommendations and opinions. Every category consist of several quality characteristics which are the minimum requirements of a high quality assurance statement as indicated by AccountAbility (2008), FEE (2004) and GRI (2006). The requirements are disclosed in Appendix D. He concluded that the categories 'reporting format' and 'assurance procedures' are positively associated with a Big4 audit firm. The category 'recommendations and opinions' is negatively associated. Perego (2009) concluded that Big4 audit firms (and he generalized the conclusion to auditors in general) are the highest quality assurance provider from overall perspective, despite the negative association with recommendations and opinions.

The perceived classification in quality of the assurance provider will be of considerable importance in Part 2, to establish the research design.

[15] This framework is analysed in chapter 2.3, when discussing the differences in output (supra, p.19).

PART 2: The choice of assurance provider

Two entities are the main actors in the concept of CSR assurance: the reporting company and the assurance provider. After having investigated the different types of assurance providers (perspective of the assurance provider), Part 2 deals with the choice of the assurance provider (perspective of the reporting company). Following research question is analysed: can an investigation of the national, industrial and business characteristics of the reporting company predict the choice of assurance provider? The subject will be researched through statistical methods. Chapter 3 collects the previous research on the choice of assurance provider, reveals the shortcomings in this research and discloses the way in which this shortcomings will be handled. Chapter 4 explains the establishment of the research design by describing the explanatory variables, the sample collection, the descriptive analysis of the sample elements and the empirical model. The results of the statistical research are ultimately shown in Chapter 5.

The knowledge gathered in Part 1 will be conducted on the collected sample to confirm or reject the previous research conclusions. The results of this content analysis are disclosed in chapter 4.3.

3. Hypothesis development

3.1 Literature review

Due to the absence of a generally agreed approach of assurance, a wide variety of assurance services and formats are offered. Choosing the right format of assurance statement is choosing the appropriate assurance provider. ENDS directory (2003) identified four external factors that influence this decision: the key stakeholder recognized by the company, the highest perceived credibility to the stakeholders, the degree of added value to the company in ways of feedback and learning, and the cost. The importance of cost is relatively to the organizational benefits of the assurance process, as the traditional auditors are more expensive than consultancies. In his research about assurance providers of non-financial services, Knechel et al. (2006) concluded that expertise and objectivity are perceived as the main factors for choosing an assurance provider, instead of cost.

A company may choose to conduct an assurance internally or externally. Corporate Register (2008) stressed that internal assurance is a less costly validation mechanism but may not be recognised as such by the stakeholders. The internal assurance process has to be conducted by an independent internal assurance team qualified for the task, which is not always possible to establish.

When choosing to externally assure the CSR report, a company is making a comparative peer analysis. Corporate Register (2008) stated that this is an example of weighing risk and opportunity and categorized companies into low risk cost savers, benchmarkers and pioneers. AccountAbility (2008) highlighted that leading companies appoint an assurance provider that challenges them and asks harsh questions. Next to the choice of assurance provider, the reporting company chooses the audit method and the scope of the audit to which the assurance provider is limited (AccountAbility, 2008).

ENDS Directory (2003) identified three types of client-companies. Confirmation seekers focus mainly on their shareholders and ask for straightforward verification of the reported information, mostly provided by the traditional auditors. Active learners are looking for an added value of the assurance process, provided as constructive feedback and expert advice in developing the sustainability processes. The expertise is founded in specialist consultancies. Crowd pleasers recognize the public as main stakeholder, and mainly appoint NGOs (ENDS Directory, 2003).

The purpose of this thesis is to reveal the influencing characteristics of companies for appointing a specific assurance provider. Two main papers asked a similar question. Simnett et al. (2009) studied national variables that "are expected to result in a greater need for companies to demonstrate that the information they produce is credible" (Simnett et al., 2009, p. 939). Companies in this situation would choose a 'higher quality' assurance provider. The researchers composed two variables that measure the degree of legal environment of a country and the orientation of the country (stakeholder or shareholder orientated) as main influencing factors, which are both significant (Simnett et al., 2009). Perego (2009) also investigated the choice of assurance provider by examining four national variables: 'the corporate governance transparency', 'the quality of the legal environment', 'the La Porta Liability Standard Index' and 'the National Corporate Responsibility Index', all of which are concluded to be significant. Both research papers are based on a global sample. Simnett et al. (2009) used global databases to collect 2.113 CSR reports with 655 assurance statements, Perego (2009) obtained the 136 CSR reports of the companies that were short listed to the 2005 ACCA Sustainability Reporting Award, which contained 69 assurance statements.

Furthermore, Simnett et al. (2009) concluded in their research paper that only 26 percent of the companies which financial statements are audited by a Big4 audit firm appointed the statutory auditor as assurance provider for their CSR report. This conclusion suggests that Big4 audit firms fail to successfully cross-sell their sustainable assurance services.

AccountAbility (2008) provided guidance to the reporting company. Besides suggestions to prepare for the assurance process, the organization listed requirements for a suitable assurance provider[16]. Corporate Register (2008) provided tips to choose the appropriate assurance provider as well. Local assurers can be selected where possible to reduce the potential costs and intensive data collection, and the site visits can be combined with other types of audits and certifications. The organization stated to prefer a real-time approach of the assurance process instead of an annual one at the end of the accounting cycle.

The limited research concerning the choice of assurance provider revealed shortcomings in different perspectives on the subject. The aim of this thesis is to extend and to refine the research on the choice of assurance provider. The shortcomings that will be handled and how this will be done, are described in the next section.

3.2 Hypothesis development

As examined in Part 1 of this thesis, a high variability in assurance providers is noticed by different researchers. Choosing between the offering parties is not an evident decision, as the different providers have their own advantages and disadvantages. Does a company want to be confirmed or to be teached by the assurance process? Why do companies have their CSR reports assured and how does a company choose the perfect assurance provider?

As Perego (2009) and Simnett et al. (2009) are the only research papers that investigated statistically the choice of assurance provider, there is a growing demand for different angles on this subject. Both research papers examine the subject on a global level, experiencing the heterogeneity of different regions[17]. This study will focus on a smaller scale, examining the sustainability leaders in CSR reporting that are located in the twelve original Eurozone countries, to cover the 'best practices' in CSR reporting and assurance. The reasons for using Europe as scope of the sample are explained in Chapter 4.2.1 (infra, p.32). The focus of the research model is on companies issuing a CSR report, because they are the only companies that decide whether to assure or not. The choice of assurance provider is investigated on a sample of companies that publish a CSR report with an assurance statement for the same reason.

[16] These requirements are already cited in chapter 2.2 (supra, p.17).

[17] Simnett et al. (2009) concluded in their global research that the assurance of CSR reports was significantly lower in the U.S than in other major countries. The researchers believed that the inclusion of U.S companies in the sample would distort the results, because U.S are highly shareholder-orientated. After excluding U.S companies, the results were indeed different: the variable STAKEHOLDER/SHAREHOLDER-ORIENTATED resulted insignificant, although being significant when the effect of U.S was included.

Basic assumptions are the variables that are explored by Perego (2009) and Simnett et al. (2009). Because their research is focused mainly on national variables, different industrial and business variables are added from more general research papers, as described in the next chapter. These variables are believed to create a need for higher credibility, which will influence both the choice of assurance and the choice of assurance provider.

Before investigating the choice of assurance provider, the choice of whether or not to assure the CSR report in the first place, is being examined to confirm or to counter the previous research (Park & Brorson, 2005; Kolk & Perego, 2008). The choice of assurance covers in essence the question whether a company is willing to bear the costs of assurance, particularly because it is a voluntary decision. Does a company differ in characteristics from others when providing a budget for the assurance process and appointing an assurance provider? Kolk and Perego (2008) investigated the effect of different variables on the choice of assurance on a global level. Park and Brorson (2005) examined the experiences and views of Swedish companies on the subject matter. No research has been done yet on European or continental European level. The first hypothesis of this study attempts to fulfil this gap in research. Hypothesis 1 will be researched in 'Model 1' and will be referred to as such.

H1: The described variables in this study significantly affects the choice of companies whether or not to assure the produced CSR reports.

The variables that will be analyzed in the next chapter (infra, p.27-32) are: NATIONALITY (LAPORTA, NATIONAL CORPORATE RESPONSIBILITY INDEX), INDUSTRY, SIZE (natural log of TOTAL ASSETS, NUMBER OF EMPLOYEES), FINANCIAL VARIABLES (PROFITABILITY, LEVERAGE), OWNERSHIP STRUCTURE and MEDIA VISIBILITY. The expectations on each variable are described in chapter 4.1. The first hypothesis can be formulated in more detail:

H1: The variables NATIONAL CORPORATE RESPONSIBILITY INDEX, INDUSTRY, TOTAL ASSETS, NUMBER OF EMPLOYEES, PROFITABILITY, LEVERAGE and MEDIA VISIBILITY have a positive effect on the choice of assurance; the variables LAPORTA and OWNERSHIP STRUCTURE have a negative effect on the choice of assurance.

The same variables are used to investigate the choice of assurance provider. As mentioned in chapter 2.1, the distinction between Big4 audit firms and Non-Big4 assurance providers is frequently examined in

previous research. Hypothesis 2 assumes that the variables have the same effect on the choice of assurance provider. Hypothesis 2 will be handled with in 'Model 2', and will be referred to as such.

H2: The variables NATIONAL CORPORATE RESPONSIBILITY INDEX, INDUSTRY, TOTAL ASSETS, NUMBER OF EMPLOYEES, PROFITABILITY, LEVERAGE and MEDIA VISIBILITY have a positive effect on the choice of an Big4 audit firm as assurance provider; the variables LAPORTA and OWNERSHIP STRUCTURE have a negative effect on the choice of an Big4 audit firm as assurance provider.

The last hypothesis refers to the order in perceived quality of assurance providers. Perego (2009) and Mock et al. (2007) identified auditors as of highest quality assurance providers (which is in line with the perceived quality of Big4 audit firms). The quality of consultants is slightly less, but of higher quality than stakeholder assurance providers. The last two categories of stakeholder involvement (stakeholder panels and NGOs), as identified by Park (2004), are included in the research design as stakeholder assurance providers. This study adds to the order by taking rating agencies into account. In a number of cases, rating agencies are providing more information on the sustainable analysis than just handing over a rate. Rating agencies are often included in a CSR report, but not often as highest quality assurance providers. Provided information on the reporting criteria and the company's performance is required for rating agencies to be recognised in the sample. The assurance providers are therefore categorised into: auditors – consultants – stakeholders – rating agencies – no assurance provider, which is a decreasing order of perceived quality. Hypothesis 3 assumes that the previously described variables have the same effect on the new quality hierarchy in assurance providers. Hypothesis 3 will be researched in 'Model 3', and will be referred to as such.

H3: The variables NATIONAL CORPORATE RESPONSIBILITY INDEX, INDUSTRY, TOTAL ASSETS, NUMBER OF EMPLOYEES, PROFITABILITY, LEVERAGE and MEDIA VISIBILITY have a positive effect on the choice of a higher quality assurance provider; the variables LAPORTA and OWNERSHIP STRUCTURE have a negative effect on the choice of a higher quality assurance provider.

In the following chapter, the variables are more detailed described, the Eurozone sample is collected and the empirical model is established. The results of statistical research of the hypotheses are provided in chapter 5.

4. Research design

4.1 Variables

The variables used by Perego (2009) and Simnett et al. (2009)[18] are completed with information on more broad research questions: the choice of assurance on CSR reports (Park & Brorson, 2005; Kolk & Perego, 2008), the choice of issuing a CSR report (Kolk, Walhain, Van de Wateringen, 2001; Kolk, 2003, Sweeney & Coughlan, 2008; Manetti & Becatti, 2009) and the choice of auditor for a financial statement audit (Meek, Roberts, Gray, 1995; La Porta, Lopez-De-Silanes, Schleifer, Vishny, 1997; Bushman, Piotroski, Smith, 2004; Knechel et al., 2006; Choi and Wong, 2007). Variables for this thesis are extracted from the research papers and are examined for use.

The dependent variables differ for each model. The choice of assurance (Model 1) is captured with a dummy variable (equals to 1 if an assurance statement is disclosed in the CSR report, and to 0 otherwise), following the method of Kolk and Perego (2009) and Perego (2009). The choice of assurance provider is measured by two methods: a dummy variable for Model 2 (equals to 1 if the assurance provider is a Big4 audit firm, and to 0 otherwise) (Perego, 2009; Simnett et al., 2009) and an ordinal variable for Model 3 (supra, p. 26). Lastly, a new dependent variable is composed as a robustness check (infra, p. 50) and equals to 1 if the assurance provider is an auditor, and to 0 if this is a consultant. The dummy variables and the ordinal variable are appropriate, considering the number of values the dependent variable can adopt.

The following national, industrial and business variables are considered as adding value.

4.1.1 Industry

One of the most frequently used explanatory variables in the explored empirical research is INDUSTRY. Simnett et al. (2009) explained that "companies belonging to industries having a greater environmental or social impact are more exposed to environmental or social risks and will have a greater need to manage these risks by purchasing assurance to increase user confidence in the credibility of the information contained in the sustainability reports they produce" (Simnett et al., 2009, p. 943). As the most (environmentally, socially or economically) sensitive industries, Simnett et al. identified 'mining', 'utilities', 'production' and 'finance'[19]. Perego (2009) identified 'petroleum', 'chemical', and 'forestry and paper

[18] The control variables, used by Perego (2009) and Simnett et al. (2009) are included in the variable collection. Identified control variables are: industry, size, profitability and leverage.

[19] Simnett (2009) offers an explanation for each of the identified industries: mining – for extracting non-renewable resources with major environmental consequences, utilities – for producing the largest amounts of greenhouse gas

products'. As a supplement to the information about the variable INDUSTRY, research information on the choice of issuing a CSR report or on the choice of assurance is added. 'Petroleum' along with other oils and gasses, are identified as a sensitive industry by Kolk et al. (2001, 2008), Corporate Register (2008), AccountAbility (2008) and KPMG (2008). The extended research also confirmed the industries 'chemicals' (Kolk et al., 2001, 2008; Corporate Register,2008; AccountAbility, 2008) and 'forestry and paper' to be sensitive (Kolk et al., 2001). Simnett et al.'s identified variables, 'mining', 'utilities' and 'financials', are also confirmed by Kolk et al. (2001, 2008), Corporate Register (2008) and KPMG (2008). For the purpose of this thesis, the 'industry classification benchmark' (ICB)[20] is used as a classification system. The sample elements are categorised according to the main activity of the company. 'Oil and Gas' is covered by category '0001 – Oil and Gas', and 'mining', 'chemicals' and 'forestry and paper' by category '1000 – Basic materials'. 'Utilities' and 'finance' are disclosed in categories '7000 – Utilities' and '8000 – Financials'. The four ICB codes (0001, 1000, 7000, 8000) will be examined in the empirical model. The assumption is made that companies categorised into one of the four sensitive industries, are more likely to assure the CSR report and to appoint an auditor of higher quality. Additionally, a dummy variable 'Sensitive Industries', which covers the four identified industries, will be examined as a robustness check.

4.1.2 Nationality

NATIONALITY is another commonly used variable, although in different dimensions. Perego (2009) used four national variables in his research: corporate governance transparency, quality of national legal environment, liability standard index and national corporate responsibility index. The latter is described as an individual variable. The former three variables are summarized into a general variable, called 'national legal environment', which is also used by Simnett et al. (2009). The national legal environment is extensively studied by Choi and Wong (2007)[21], indicating the existence of two competing views. Conform the agency theory, auditors may substitute governance in weak legal environments (Choi and Wong, 2007). Applying to the purpose of this thesis, Choi and Wong (2007) would suggest a negative relation between choosing an auditor and the strength of a legal environment. As opposed to this view, Choi and Wong (2007) stated that weak legal environments are failing to provide "credible disciplinary mechanisms" for auditors, by which they conclude to a positive relation between choosing an auditor and the strength of a legal environment, or more precisely, a positive relation between not choosing an auditor and a weak legal environment (Choi

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emissions, production – for using energy and producing industrial waste products in significant amounts, finance – for materially influencing the financial well being of societies and having a large 'social footprint' (Simnett 2009)

[20] ICB is developed by Dow Jones and FTSE and adopted by stock exchanges representing over 65% of the world's market capitalization, including NASDAQ and NYSE. More information on www.icbenchmark.com

[21] Choi and Wong (2007) researched the choice of auditor for assuring financial statements (Big4 or non-Big4).

and Wong, 2007, p. 15-16). Choi and Wong (2007), followed by Perego (2009), Kolk and Perego (2008) and this thesis, supported the first view as main statement. The influence of national legal environment is calculated by using the legal index of La Porta et al. (1997). La Porta's index constitutes of two other own-build indices[22], the investor protection index (or anti-directors index) and the law enforcement index. The former measures the level of rules and regulations for investor protection, the latter measures the quality of the legal enforcement (La Porta, et al., 1997). The La Porta's value for each Eurozone country is given in table 3, except for Luxembourg (this country was not included in La Porta's research).

Nationality: the variables La Porta and NCRI				
Country		**La Porta's Index**	**NCRI**	**Orientation**
Belgium	BE	5	66,7	Stakeholder
France	FR	7,49	65,3	Stakeholder
The Netherlands	NL	7	68,3	Stakeholder
Portugal	PT	7,34	59,1	Stakeholder
Austria	AT	7	66,7	Stakeholder
Finland	FI	8	72,2	Stakeholder
Germany	DE	5,62	68	Stakeholder
Greece	GR	5,09	57,4	Stakeholder
Ireland	IR	7,9	66,6	Stakeholder
Italy	IT	5,2	56,9	Stakeholder
Luxembourg	LU	-	-	Stakeholder
Spain	ES	7,9	61,9	Stakeholder

Table 3: The national variables LaPorta, NCRI and Orientation

Simnett et al. (2009) used another angle for covering the NATIONALITY. He argued that the choice of assurance provider is influenced by the business culture of a country, in particular whether a country is shareholder- or stakeholder orientated. Simnett et al. (2009) suggested that companies in a stakeholder-orientated (communitarian) culture are more likely to provider 'higher quality' assurance to satisfy all stakeholders than companies in a shareholder-orientated (contractarian) culture. The companies in this research sample, however, are all situated in a stakeholder-orientated country, as classified by Simnett et al. (2009), therefore the variable is not included in this research design. Examples of shareholder-orientated countries are the U.S, U.K, Australia and Canada.

The variable NATIONAL CORPORATE RESPONSIBILITY INDEX (NCRI) is also situated on a national level. The index, developed by AccountAbility as a part of the Responsible Competitiveness Index, provides data on

[22] The formula used for calculating the legal index is: ENF_PRO = (50% x ENFORCEMENT) + PROTECTION (La Porta, 1997)

the "nations' state of corporate responsibility" (AccountAbility, 2005, p. 14) for comparability analysis[23]. A value for each country indicates the level of corporate social responsibility progress. Perego (2009), and Kolk and Perego (2008), identified the NCRI as a potential factor to influence the choice of assurance provider, because the index determines the customized CSR culture of a country. The higher the CSR culture of a country, the higher the quality a company will demand from the assurance provider. The reporting company will choose a higher quality assurance provider. The NCRI values for each country are provided in table 3.

4.1.3 Business

The variable MEDIA VISIBILITY is the most difficult one to measure, that's why this variable is measured the least. One researcher approximated this variable in his research, about the voluntary adoption of CSR standards, using the press database Lexis-Nexis (Nikolaeva & Bicho, 2010). The same method of data collecting is followed in this thesis. Considering the hard accessibility of the former database, the press database Pressdisplay.com[24] is used. Worldwide press of the past three months has been searched for articles with the terms 'CSR', 'sustainability', 'environmental', social responsibility' and 'socially responsible' in combination with the company's name, following the research method of Nikolaeva and Bicho (2010). Every mention is calculated, giving a total number for each company. The variable's considerable constraints have been noticed[25]. Higher media visibility will result in more credible CSR information to the stakeholders, and a higher quality assurance provider will be appointed.

Choi and Wong (2007) considered the OWNERSHIP STRUCTURE of a company as an important variable for determining the choice of auditor. Following the research of Choi and Wong (2007), the variable is approximated as the immediate ownership percentage of the largest shareholder. A lower percentage would indicate that the ownership structure is diffused and a credible, high quality assurance provider is needed. This variable is also a reversed proxy to the free float of a company[26].

SIZE is mostly used as a control variable in research. Two ways of calculating size are used in this thesis: approximated as the natural log of the number of employees, following Manetti and Becatti (2008), and as the natural log of total assets, following Choi and Wong (2007). Both represent the scale and complexity of the assurance process (Choi and Wong, 2007). Total assets determines the environmental and economic

[23] The criteria used to develop the index are described in (AccountAbility, 2005, p. 99).
[24] Pressdisplay.com is a Canadian press database, covering 93 countries and 46 languages. More information on www.pressdisplay.com.
[25] This paper considers the constraints of overlap in articles, the availability of only the last three months, the higher amount of appearances of large international companies and the use of only English terms in search engine.
[26] The free float of a company is the amount of stocks that are listed on the stock exchange and are free for purchase to the common shareholder.

aspect of CSR, number of employees the social aspect. Corporate Register (2008) concluded that large companies typically appoint a Big4 assurance provider, because of the larger budgets and the perceived reach and competence of a Big4 audit firm.

Two financial variables are introduced: LEVERAGE and PROFITABILITY (control variables, identified by Perego (2009) and Simnett et al. (2009)). According to the agency theory, companies have higher agency costs when contracting more to debts (Meek et al., 1995). Companies with higher profitability are putting more energy in stabilising this profit, which could positively influence the choice of assurance provider (Meek et al., 1995). For each of the two variables, a standard ratio is chosen and applied to all sample elements to increase the uniformity[27]. Leverage is calculated as Current Debt plus Non-Current debt over Equity. Profitability is proxied by the Return on Assets (ROA).

The dependent and explanatory variables are summarised into table 4.

Variable definitions		
Variable (abbreviation)	**Definition (source)**	**Hypothesis (sign)**
Dependent variable		
Assurance statement (ASS_YESNO)	Dummy variable equals to 1 if a CSR report of the reporting company is accompanied by an assurance statement, and to 0 otherwise (Kolk & Perego, 2009; Simnett et al., 2009)	H1
Assurance provider (ASS_BIG4	Dummy variable equals to 1 if the assurance statement is produced by a Big4 assurance provider, and to 0 if the assurance statement is produced by an other assurance provider (Perego, 2009; Simnett et al., 2009)	H2
Assurance provider (ASS_LIKERT)	Ordinal variable (on a Likert5 scale) equals to 5 if the assurance statement is produced by an auditor, equals to 4 if the assurance statement is produced by a consultant, equals to 3 if the assurance statement is produced by a rating agency and to 0 if no assurance statement is produced	H3
Assurance provider (ASS_AUDCONS)	Dummy variable equals to 1 if the assurance statement is produced by an auditor, and to 0 if the assurance statement is produced by a consultant	Robustness check
Independent variables		
Industry		
Oil and gas (ICB_0001)	Dummy variable equals to 1 if the reporting company is situated in the 'Oil and Gas' industry, and to 0 otherwise (Perego, 2009; e.a.)	H1, H2, H3 (+)
Basic materials (ICB_1000)	Dummy variable equals to 1 if the reporting company is situated in the 'Basic Materials' industry, and to 0 otherwise (Perego, 2009; Simnett et al.; 2009; e.a.)	H1, H2, H3 (+)

[27] Ratio's, which are given in databases or corporate websites, mostly lack an explanation of the used formula which may lower the comparability.

Utilities (ICB_7000)	Dummy variable equals to 1 if the reporting company is situated in the 'Utilities' industry, and to 0 otherwise (Perego, 2009; Simnett et al.; 2009; e.a.)	H1, H2, H3 (+)
Financials (ICB_8000)	Dummy variable equals to 1 if the reporting company is situated in the 'Financial' industry, and to 0 otherwise (Simnett et al., 2009; e.a.)	H1, H2, H3 (+)
Sensitive industries (ICB_SENS)	Dummy variable equals to 1 if the reporting company is situated in one of the four identified industries ('Oil and Gas', 'Basic Materials', 'Utilities' and 'Financials'), and to 0 otherwise (Perego, 2009; Simnett et al., 2009; e.a.)	Robustness check (+)
Nationality		
La Porta index (LAPORTA)	Quality of the legal enforcement of the country in which the reporting company is situated and the level of rules and regulations for investor protection. Index composed by La Porta et al. (1997) (Choi & Wong, 2007)	H1, H2, H3 (-)
National Corporate Responsibility Index (NCRI)	National Corporate Responsibility Index (NCRI) composed by AccountAbility (2005) for the country of the reporting company (Kolk & Perego, 2008; Perego, 2009)	H1, H2, H3 (+)
Media visibility (MEDIA)	The frequency of articles on the reporting company, constricted to the combination with specified terms (Nikolaeva & Bicho, 2010)	H1, H2, H3 (+)
Ownership structure (OWNERSHIP)	The percentage of ownership by the largest shareholder of the reporting company (Choi & Wong, 2007)	H1, H2, H3 (-)
Size		
In terms of total assets (TOTASSETS)	Natural log of total assets of the reporting company in same year as published CSR report (Choi & Wong, 2007)	H1, H2, H3 (+)
In terms of number of employees (EMPLOYEES)	Natural log of number of employees of the reporting company in same year as published CSR report (Manetti & Becatti, 2008)	H1, H2, H3 (+)
Financial variables		
Profitability (PROFITABILITY)	Return on assets of the reporting company in same year as published CSR report (Meek et al., 1995; Perego, 2009; Simnett et al.; 2009)	H1, H2, H3 (+)
Leverage (LEVERAGE)	Current and Non-current debt over Equity (Leverage) of the reporting company in same year as published CSR report (Meek et al., 1995; Simnett et al., 2009)	H1, H2, H3 (+)

Table 4: The dependent and independent variables used in the research design

4.2 Sample

4.2.1 The relevance of an European sample

As Corporate Register (2008) concluded in their Assurance Statements Report, Europe is the sustainable leading region with 30 percent of the assured CSR reports worldwide. Kolk (2005) stated as a reason that Europe has a more external, sustainability orientated approach and therefore more frequently verifies CSR

reports, in comparison with U.S. and Japan. Looking at the reasons for this phenomenon, a number of regulatory instruments and initiatives of the European Commission are identified.

Regulating instruments that are established by the EU consist of mandatory and voluntary systems to lead and monitor sustainability reporting and have to be complied by all member states. Examples are the Accounts Modernisation Directive, the European Pollutant Release and Transfer Register (PRTR), the Integrated Pollution Prevention and Control Directive (IPPC), the EU Eco-Management and Audit Scheme (EMAS)[28] and the EU Emission Trading System (ETS) (European Commission, 2011a). Furthermore, EU member states are following the sustainability emphasis of the European Commission by providing mandatory or voluntary CSR reporting legislation themselves. This phenomenon is more widely developed in Western European than East European countries (European Commission, 2011a). Affected companies mostly are listed, large, state-owned or energy-intensive companies, public agencies and NGOs (European Commission, 2011a). Examples of national reporting legislation are France and The Netherlands. France obliges companies that are listed on the French stock market to include social and environmental information in the annual reports. Companies listed on the stock exchange in The Netherlands, and all state-owned companies are obligated to report on CSR to the supervisory board and the stakeholders. Other provided CSR initiatives to companies consist of benchmark instruments, best practice examples, participation in discussions about the future of reporting and assisting developing countries in data-collection technologies (European Commission, 2011b).The European Commission have bundled all national policies in the EU in two Compendiums, focusing on country by country comparability (European Commission, 2007) or on thematic categories (European Commission, 2011c). The effect of these regulating instruments on the relevance of assurance statements is concluded by the European Commission as follows: "Among European countries, assurance is growing in those Member States where the debate on sustainability reporting has already matured" (European Commission, 2011a, p. 30). This is the case for EU countries.

Europe is a relatively homogenous region when excluding U.K. and Switzerland. Subsequently, continental Europe is the perfect fit to research the choice of assurance provider. Continental Europe is proxied by the twelve countries that established the Eurozone (the countries that started to use the new common currency

[28] The EMAS regulation requires more information because of its importance to CSR reporting. The EU Eco-Management and Audit Scheme (EMAS) is a management tool for companies to evaluate, report and improve their environmental performance (European Commission, 2011a) . EMAS requires companies to use environmental performance indicators (both generic and sector-specific) to increase relevance and comparability of the provided information.

on the first of January, 2002), which are Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, The Netherlands, Portugal and Spain. In the following research design, CSR reports and assurance statements are collected in these twelve countries.

4.2.2 Collecting Continental-European sustainability leaders

The sample used to assess the choice of assurance provider, covers the largest sustainability leaders in the Eurozone, by combining three European sustainability indices: the Euro STOXX Sustainability Index[29], the Dow Jones Sustainability Eurozone Index[30] and the FTSE4GOOD Europe index[31]. The first two indices contain socially responsible companies in the Eurozone. FTSE4GOOD Europe lists European sustainable companies, from which the Eurozone companies are extracted. On the 10th of April 2011, a total of 227 unique companies are identified in the combination[32]. The companies in the sample share a number of characteristics, which can distort the results of the research. The appearance of the companies in the sustainability indices means that all companies are listed on one or more stock exchanges, have conceptually the same legal form and the majority of those companies are publishing consolidated data. The size of the companies ranges from large to very large. The sample that is composed by this reporting companies, is categorised by country and by industry in table 5 and 6.

[29] The Euro STOXX Sustainability Index is licensed by STOXX Ltd, a German company owned by Deutsche Börse AG and SIX Group AG. More information on www.stoxx.com.

[30] The Dow Jones Sustainability Index is one of the sustainability indices, that is established by a cooperation between Dow Jones Indices and Sustainable Asset Management (SAM). The index covers the Eurozone companies in the top 20% of the largest 600 European companies in terms of sustainability, aiming to provide a reliably and objective benchmark to sustainable companies. More information on www.sustainability-index.com.

[31] The FTSE4GOOD Europe Index is launched by the FTSE Group to provide a tool for investment, research, reference and benchmark. More information on www.ftse.com/Indices/FTSE4Good_Index_Series/index.jsp.

[32] Appendix G

Number of CSR reports and assurance statements by country							
Country		Total sample	CSR report	No CSR report	Assurance statement	No assurance statement	Assurance percentage
Belgium	**BE**	12	11	1	7	4	63,64%
France	**FR**	71	55	16	33	22	60,00%
The Netherlands	**NL**	23	20	3	16	4	80,00%
Portugal	**PT**	7	6	1	4	2	66,67%
Austria	**AT**	4	2	2	1	1	50,00%
Finland	**FI**	13	11	2	6	5	54,55%
Germany	**DE**	42	33	9	14	19	42,42%
Greece	**GR**	4	3	1	1	2	33,33%
Ireland	**IR**	2	1	1	1	0	100,00%
Italy	**IT**	19	16	3	14	2	87,50%
Luxembourg	**LU**	3	1	2	0	1	0,00%
Spain	**ES**	27	25	2	23	2	92,00%
TOTAAL		227	184	43	120	64	

Table 5: Defining the sample by country: numbers on CSR reports and assurance statements by country

Number of CSR reports and assurance statements by industry					
Industry		CSR report	Assurance statement	No assurance statement	Assurance percentage
Oil & Gas	**0001**	9	8	1	88,89%
Basic Materials	**1000**	17	10	7	58,82%
Industrials	**2000**	34	17	17	50,00%
Consumer Goods	**3000**	21	17	4	80,95%
Health Care	**4000**	4	2	2	50,00%
Consumer Services	**5000**	23	11	12	47,83%
Telecommunications	**6000**	10	9	1	90,00%
Utilities	**7000**	16	12	4	75,00%
Financials	**8000**	41	26	15	63,41%
Technology	**9000**	9	8	1	88,89%
TOTAAL		184	120	64	

Table 6: Defining the sample by industry: numbers on CSR reports and assurance statements by industry

CSR information has been searched for each company in the form of a special purpose report covering the complete scope of Corporate Social Responsibility (not focusing on environmental or social information only). CSR or related reports are collected using the corporate websites of each company, supplemented by

the reports extracted from the e-database Corporate Register[33]. As a compromise to the fact that companies do not issue a CSR report annually, the latest published report is used in the sample. The majority of the reports covered the 2009's data. CSR disclosures in financial statements are not included in the sample, unless the CSR chapters are also published as a standalone file. This research design is hereby safeguard against the so-called 'silent third party assurance' (Park & Brorson, 2005), which is the declaration that the CSR information in the annual report has also been verified, although this could not be demonstrated to the stakeholders. CSR websites, the new trend as described in the introduction of this thesis (supra, p.1), is included in the sample, however with careful consideration. CSR websites are the next step in the evolution of CSR reporting, although the reported information can be frequently changed and the range of the assurance on the website is questioned (Adams & Evans, 2004; Kolk, 2005). Société Générale and Shell are examples of sample companies issuing a CSR website.

A total number of 184 CSR reports are found through the two mentioned search methods. The titles of the considered reports are broadly categorized in figure 4. Despite the mentions of active social and environmental participation on the website, a company is not considered as 'issuing a CSR report' if the company does not publish a standalone report or a well-defined CSR website[34].

[33]Corporate Register is a complete directory of published CSR and other social/environmental reports. More information on www.Corporate Register.com

[34] Some notes are made on the reports in the sample: Ageas is established on the remains of the former Fortis (since the 30th of April 2010), therefore the last CSR report of Fortis (covering the year 2009) is used in the sample. Aperam is a spin-off of ArcelorMittal, not yet publishing a report on his own, and has therefore been removed from the sample. Société Générale, TNT, Unilever and Wolters Kluwer are only producing a CSR website, no standalone report is published.

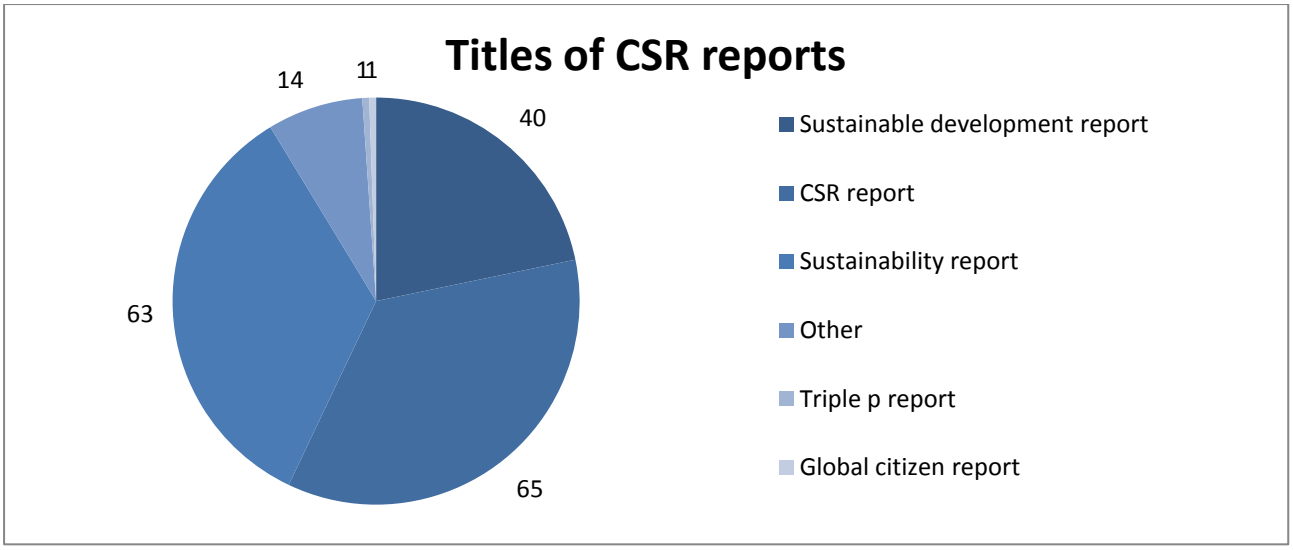

Figure 4: The different titles of CSR reports

The CSR reports are analysed for the presence of a third party assurance statement. The minimal requirement is a factual statement of assurance on the information in the report. The appearance of only the name of the third party assurance provider is considered as not sufficient. Certification bodies and sustainable indices are excluded for this requirement. From the sample, 120 assurance statements are included in the reports. Different terms for assurance are used, however the term 'assurance' most frequently appears. The different titles of the assurance statements are visualised in figure 5. The lower appearance of the term 'verification' is consistent with previous research (supra, p. 5). The term 'independence' or 'extern' is used in the title in 66 cases, referring to the main requirement of an assurance statement. The term 'limited' is used in 13 assurance statements, all of which are drafted by auditors. The use of this term represents a form of protection for the integrity of the audit firm's name.

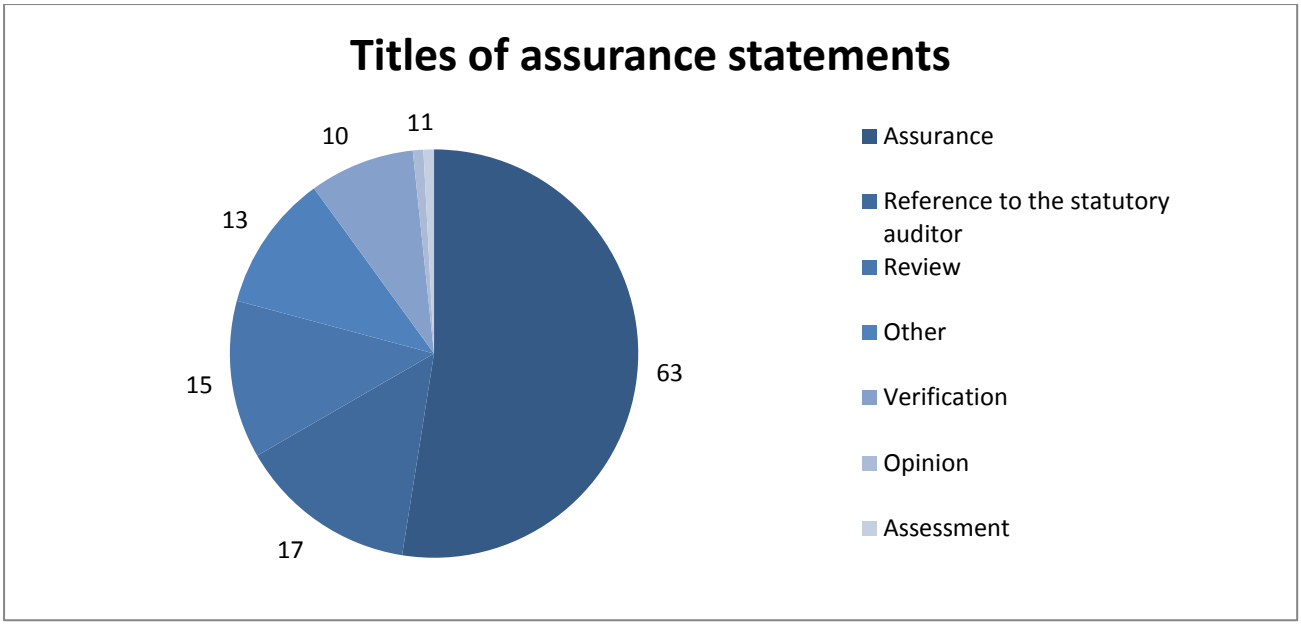

Figure 5: The different titles of assurance statements

If an assurance statement was produced by more than one assurance provider, the provider of 'highest quality' was included in the sample, consistently with the previously reasoning (supra, p. 20). The traditional auditor is the assurance provider in 91 cases, followed by consultants, rating agencies and stakeholders. Big4 consultant departments are categorized as Big4 or Auditors when appearing in the sample, because of the shared knowledge and resources. One Non-Big4 auditor is identified in the sample as 'highest quality' assurance provider, namely BDO. Additionally, one stakeholder assurance provider is founded in the sample, namely the stakeholder panel appointed by Royal Dutch Shell. This company is included in the FTSE4GOOD index, but not in the other indices[35]. All different assurance providers are listed in Appendix E. KPMG is the most frequently appointed assurance provider (33 assurance statements), directly followed by PWC (32). KPMG is also the only Big4 audit firm for which the sustainability department signed the statement in a number of cases. The most frequently appointed consultants are Bureau Veritas and SGS (both 4 assurance statements). The ratio Big4 firm/non-Big4 firm is 90/30. The audit firms of Portugal are investigated for using their domestic name (although a Big4 alliance), but every auditor used the international corporate name.

[35] When asking SAM why Shell was not included in the Dow Jones Sustainability Index, although included in the 'SAM Sustainability Yearbook', the organisation stated that Shell scored high enough on the pure quantitative criteria to be included in the yearbook, but was excluded from the index by a decision of the Index Design Committee, although also scoring high on the Corporate Sustainable Assessment (questionnaire, media and stakeholder analysis). The exclusion was based on qualitative reasoning. The other companies for which a stakeholder assurance provider was identified in chapter 2.1.3 (supra, p. 16), EDF and ADP, scored not high enough to be inserted in the yearbook or the index.

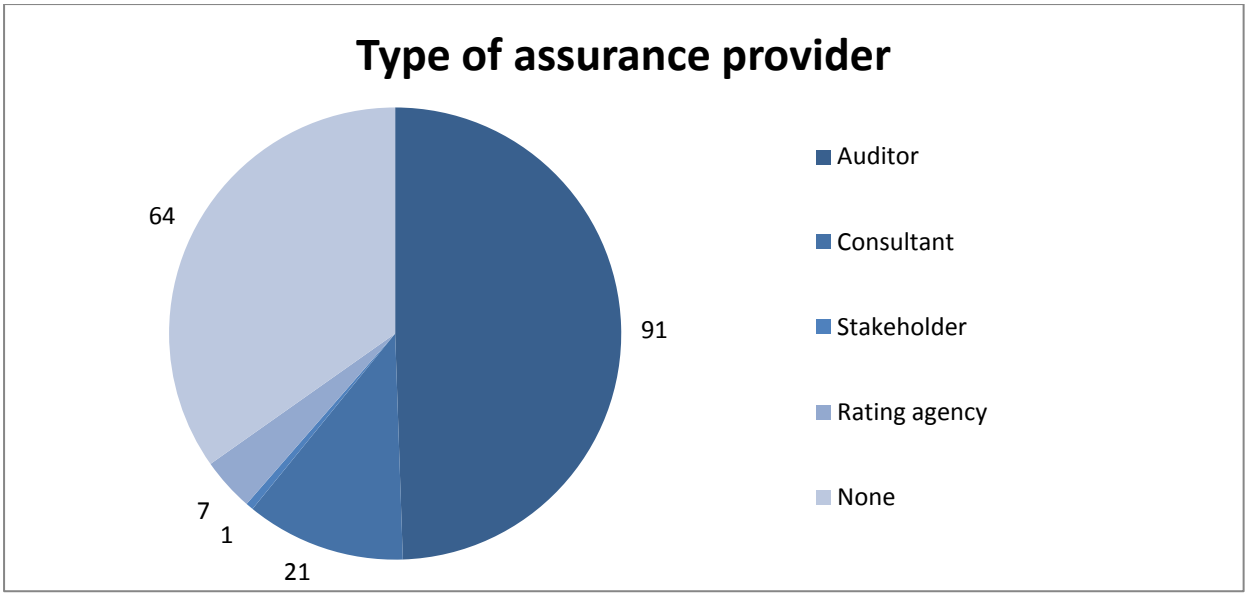

Figure 6: Different types of assurance providers

Concerning the variables that are described in the previous section (supra, p. 27-32), a number of early statements can be made. The variable SIZE will start from a high number in absolute terms, which gives the variable SIZE in the research a more relative nature. As Corporate Register (2008) concluded, the percentage of the largest worldwide companies (the Global FT500 companies in the research) assuring their CSR reports is higher than across all companies (Corporate Register, 2008), which is a constrain to the generalisation of the outcome. The nationality of the companies is divided over the twelve Eurozone countries, which have several shared characteristics. The variable STAKEHOLDER/SHAREHOLDER ORIENTATION, investigated by Simnett et al.(2009) (supra, p. 29), is excluded from the research for this reason. The different sample countries have in a number of cases CSR-related regulations, which could have an influence on the outcome of the empirical research. Financial information of 2009 is collected for every company to calculate the financial variables, in accordance to the date of the CSR reports. Collecting methods consisted of research on the corporate websites, the annual reports and information from the national stock exchanges[36]. The use of an European sample instead of a global sample can result in different effects of the variables than in previous research.

[36] The websites of the EURONEXT, the DEUTSCHE BÖRSE and the BORSA ITALIA are consulted for financial information, just as the website of financial analyst company HOOVERS.

4.3 Content analysis: differences in output

Owen and O'Dwyer (2004, 2005, 2007) and Deegan et al. (2006) analysed the content of samples of assurance statements. Their research is described in chapter 2.3 (supra, p. 19). Following the approach of the researchers (and using the framework in Appendix D), the assurance statements from the sample are analysed for a number of terms. A total of 97 assurance statements of the sample are considered to be accessible to be subject of a content analysis[37]. Confirming the research of Owen and O'Dwyer (2004, 2005, 2007) and Deegan et al. (2006), auditors address the assurance statements in 46 cases (57%), of which 35 cases solely address a corporate figure (5 statements address the general reader, 6 statements address the company in general). Consultants address the statement in 5 cases (31%), which always included the stakeholders. The independence is identified in 40 auditor's statements (50%) and in 9 consultant's statements (56%). Auditors specify the scope of the assurance statements explicitly in 81 cases (100%), consultants do this in 15 cases (93%), same numbers are found for the explicit identification of the approach. The completeness is mentioned in 11 auditor's cases (13%) and in 3 consultant's cases (18%). The terms 'inclusivity, materiality and responsiveness' (the highlights of standard AA1000AS) appear in a high number of assurance statements, included as a way to structure the recommendations. Interestingly to notice, the differences in assurance output are considerably smaller that assumed from previous research (Owen & O'Dwyer, 2004, 2005, 2007; Deegan et al., 2006).

Auditors are reluctant to provide a reasonable level of assurance. Instead, they only state a moderate level of assurance in 68 (83%) cases, concluding the assurance statement in a negative way (the common way to conclude the assurance statement is for example: "Nothing came to our attention that causes us to believe that..." (Belgacom, 2009, p. 83)). In 9 cases (11%), the moderate level of assurance is combined with a reasonable level for certain indicators (i.e. a hybrid conclusion). In three cases an auditor provided a reasonable level. Consultants tend to be more positive: 10 (62%) positive conclusions, 2 moderate conclusions (12%), but which are also positively formulated. The term '(truly and) fairly' appears in the statements in 12 auditor's cases (15%). As indicated previously in the research of Owen and O'Dwyer (2004), consultants provided recommendations in 11 cases (68%). Auditors recommended improvements in 40 assurance statements (50%), which is also a high level to consider (supra, p. 10).

Regarding the identified standards and guidelines for assuring a CSR report, the content analysis indicated the GRI guidelines as most frequently used reporting criteria (the guideline is mentioned in 48 auditors'

[37] The residual assurance statements are excluded because the content is not translated from their original language or the statements are not readably disclosed in the CSR reports.

assurance statements and 10 consultants' assurance statements). Companies in the sample provide the reporting criteria of GRI as a self-assessment in a high number of cases, which the assurance provider can use as scope of the assurance process (to analyse if the company is 'in accordance with' the reporting criteria). The ISAE 3000 standard is mostly used by auditors (55 cases), followed by the AA1000AS standard (20 cases). Consultants use the ISAE3000 standards 3 cases, although this standard is solely focused on auditors. The AA1000AS standard is mentioned in 8 cases (50%). All results are disclosed in table 7 below.

Differences in output: appearances of terms in the assurance statements						
	PWC	**Ernst&Young**	**KPMG**	**Deloitte**	**Total of auditors**	**Consultants**
Number of researched assurance statements	26	19	26	9	81	16
Addressee	20	10	13	3	46	5
Responsibility client	26	19	26	8	80	9
Responsibility assurance provider	26	19	26	8	80	9
Scope	26	19	26	9	81	15
Approach	26	19	26	9	81	15
Conclusions						
Moderate	25	13	22	7	68	2
Reasonable	0	3	0	0	3	10
Both	1	2	4	2	9	1
None	0	1	0	0	1	2
Recommendations	11	8	14	7	40	11
Notion of independence	12	7	16	5	40	9
Completeness	4	5	1	1	11	3
the term '(truly and) fairly'	0	1	10	1	12	2
Guidelines						
GRI Version 3.0	18	8	16	5	48	10
ISAE 3000	17	16	17	5	55	3
AA1000AS	6	2	7	5	20	8
3410N	2	0	3	1	6	1

Table 7: Differences in output: appearances of terms

When studying the Big4 audit firms, different emphases are founded between the firms. Deloitte provided recommendations in 7 out of 9 cases (77%). KPMG more frequently used the term 'fairly': 10 (83%) of the identified assurance statements with this term are produced by KPMG. Ernst&Young provided a reasonable level of assurance (positive assurance) in 3 cases. In one case, the company provided no assurance. PWC tend to more frequently address the assurance statement (77% of the cases). As indicated in chapter 2.3 (supra, p. 18), auditors adopt a structured approach, which is strongly visible in the produced assurance

statements. The statements are following the next order of information: (addressee), client and task, responsibility of the company, responsibility of the auditor, scope, approach, (negative) conclusions (and recommendations)[38]. Additionally, Deloitte provided an example of a disclaimer by stating in the Unilever's assurance statement: "Our work has been undertaken so that we might state to the Company those matters we are required to state to them in this report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than Unilever for our work, for this report, or for the conclusions we have formed" (Unilever, 2009, p. 2).

The assurance statements produced by consultants are evolving to the structured statements of auditors. This is particularly the case for large consultancy firms SGS and Bureau Veritas. Other statements are less general in structure and are produced conform the working method of the assurance provider. Consultants tend to more frequently describe their competences and the company itself as a way to justify the added value of their assurance services. Most consultancy firms do not have a widespread reputation of high quality service like auditors have.

The assurance statement of Royal Dutch Shell is the solely statement produced by a stakeholder panel in the sample. Previous research questioned the qualitative dimension of this sort of assurance provider (Park, 2004; Corporate Register, 2008; Supra, p. 16). When looking at the assurance statement of Shell, the previous research can be confirmed (although having only one sample element). The statement is positive in nature and summarizes the hot topics of the CSR report. Disagreeing conclusions consist of suggestions to provide more information on a number of topics.

Lastly, seven companies in the sample appointed no individual assurance provider, but instead disclosed the results of performance analyses by rating agencies. The 'assurance statements' consist of particularly visual data, complemented by a verbal commentary.

As described in chapter 3.1 (supra, p. 23), Simnett et al. (2009) concluded that only 26 percent of the companies choose their statutory auditor as CSR assurance provider. Performing the same analysis on the sample of this thesis, a significant higher percentage is founded. 65 companies in the sample appointed the statutory auditor to assure the CSR report, which is 72% of the companies appointing a Big4 audit firm and 54% of the companies appointing an assurance provider in general. Only half of the companies request the statutory auditor for this function. This fact demonstrates that other reasons are considered than just convenience, the perceived added value of other assurance providers has been taken into consideration.

[38] The assurance statement of DANONE is provided as an example in Appendix G (DANONE, 2009).

4.4 Descriptive analysis

The first hypothesis tested is the influence of described variables on the choice whether or not to assure the CSR reports (Model 1). Detailed tables and graphs are provided in appendix H. Looking at the industries that are described as 'the sensitive industries', the percentages are not the highest among all industries. The issuance of assurance statements appears on average in 65% and ranges from 48%-90% in comparison with the produced CSR reports. ICB categories 0001, 1000, 7000, 8000 issue assurance statements in respectively 89%, 59%, 75% and 63% of the produced CSR reports, which are not the highest percentages (81%, 90% and 89% of the CSR reports from categories 3000, 6000 and 9000 are assured). When taking the industries in one variable, the absolute numbers are higher in the category of non-sensitive industry (64 versus 56), but are reversed in relative numbers (63% versus 68%). Industry will not be a highly significant variable in the empirical model. French companies produced 33 assurance statements, by which France is the country with the most assured companies. Ireland scores highest in relative numbers (100%), because only one company is inserted in the sample, followed by Spain (92%), Italy (87%) and The Netherlands (80%)[39].

The average percentage of largest owner is higher for assuring companies, which is in line of the expectations (32% versus 27%). Furthermore, companies with a higher media visibility are more likely to assure the CSR report, the same conclusion is made for leverage and number of employees[40]. Profitability is lower for assuring companies, which is contradictory to the hypothesis.

The choice of assurance provider is divided into the hypotheses Big4/NonBig4 (Model 2) and Auditor/Consultant/Stakeholder/Rating agency/None (Model 3). Big4 is the biggest assurance provider in all industries, except for the ICB category '4000 – Health Care' (50% of the assurance statements). The sensitive industries, as indicated by previous research, do not stand out of the sample, which indicate that the variable will again not be significant. In 10 countries is a Big4 assurance provider most frequently appointed. Assurance statements in Belgium are assured by Non-Big4 in 57,14% of the cases, which is the highest country percentage, excluding the one Irish company that appointed a Non-Big4 for assurance. Ownership structure, media visibility, size, number of employees and leverage are higher in case of Big4 assurance provider, Profitability is lower (3,47% versus 3,74%). Numerical and visual evidence is again provided in Appendix H.

The percentage of consultants as assurance providers is the highest in industry '3000 – Consumer Goods' (23,81%). The only company which has chosen for a stakeholder assurance provider in the sample (Royal

[39] All percentages are comparisons to the numbers of CSR reports in every category.
[40] Numerical evidence is provided in Appendix H.

Dutch Shell) is located in '0001 – Oil and Gas'. The auditor is appointed in 18 cases in industry '8000 – Financials', which is the largest absolute number. The dummy 'sensitive industry' will again be insignificant. French companies most frequently appointed an auditor as assurance provider (in 27 cases), followed by Spain (19 cases). Spanish companies also hired the highest number of consultants (in 4 cases). The lowest average percentage of the biggest owner of a company is founded in case of a stakeholder assurance provider, although this outcome is distorted by the single element in the stakeholder section. Ownership in case of auditors and consultants is lower than in case of rating agencies and no assurance provider, which is partly evidence to the statement of Choi and Wong (2007). Media visibility in case of auditor assurance provider is higher than in case of consultant or rating agency, but lower compared to 'no assurance provider'. Little significant differences are identified in case of size (natural log of total assets) and number of employees. Companies with a higher average profitability significantly appoint an auditor as assurance provider. Lastly, the average leverage in case of an auditor is lower than in case of consultant or no assurance provider, which is also a contradiction to the stated hypothesis. Overall, the variables of explored means are not showing a significant trend in the sample.

4.5 Empirical model

The described hypotheses are tested using binary and ordinary logistic regressions in the statistical programme SPSS. A binary logistic regression is used because it estimates the effect of the described variables on a dummy variable, in this case the variable ASS_YESNO (Model 1) and the variable ASS_BIG4 (Model 2). An ordinary logistic regression will be used on the variable ASS_LIKERT (Model 3). This type of regression provides the same concept, but with an ordinal Likert 5 variable as the dependent variable. The statistical output is analysed following the methods of De Pelsmacker and Van Kenhove (2006).

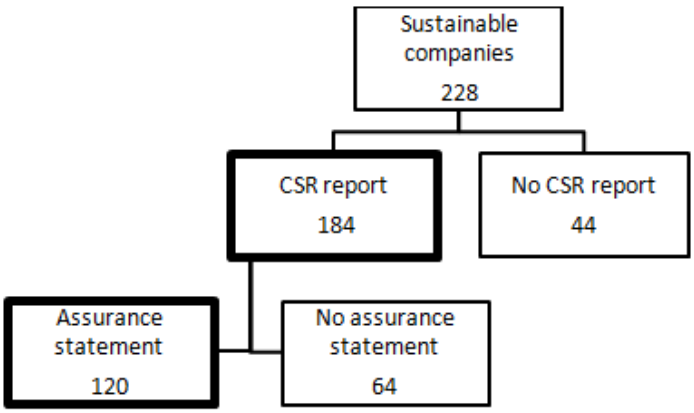

Figure 7: Decision tree to define the used samples

The different regressions are executed on different samples, as illustrated in figure 7 , following the method of Simnett et al. (2009). The first hypothesis, the choice whether or not to assure the CSR report (Model 1), is based on the subset of 184 CSR reports. The regression formula to test hypothesis 1 is as follows:

ASS_YESNO = f(INDUSTRY, NATIONALITY, SIZE, FINANCIALS, OWNERSHIP, MEDIA)

Or in terms of the described variables:

$$ASS\_YESNO = \alpha + \beta_1 ICB\_0001 + \beta_2 ICB\_1000 + \beta_3 ICB\_7000 + \beta_4 ICB\_8000 + \beta_5 LAPORTA + \beta_6 NCRI + \beta_7 TOTASSETS + \beta_8 EMPLOYEES + \beta_9 PROFITABILITY + \beta_{10} LEVERAGE + \beta_{11} OWNERSHIP + \beta_{12} MEDIA$$

The choice of assurance provider is modelled in two steps. Firstly, a binary logistic regression is used to test how companies choose between a Big4 and a Non-Big4 assurance provider (Model 2). The sample used is the subset of 120 assurance statements. The used model and detailed formula are again as follows:

ASS_BIG4 = f(INDUSTRY, NATIONALITY, SIZE, FINANCIALS, OWNERSHIP, MEDIA)

$$ASS\_BIG4 = \alpha + \beta_1 ICB\_0001 + \beta_2 ICB\_1000 + \beta_3 ICB\_7000 + \beta_4 ICB\_8000 + \beta_5 LAPORTA + \beta_6 NCRI + \beta_7 TOTASSETS + \beta_8 EMPLOYEES + \beta_9 PROFITABILITY + \beta_{10} LEVERAGE + \beta_{11} OWNERSHIP + \beta_{12} MEDIA$$

Secondly, an ordinary logistic regression is used to test which variables influence the choice between auditor, consultant, stakeholder, rating agency or none (Model 3). The dependent variable is a Likert 5 variable, following the order of assurance providers as explained in chapter 3.2. The model is tested on the same subset as hypothesis 1, namely the 184 CSR reports. Following model and formula are established:

ASS_LIKERT = f(INDUSTRY, NATIONALITY, SIZE, FINANCIALS, OWNERSHIP, MEDIA)

$$ASS\_LIKERT = \alpha + \beta_1 ICB\_0001 + \beta_2 ICB\_1000 + \beta_3 ICB\_7000 + \beta_4 ICB\_8000 + \beta_5 LAPORTA + \beta_6 NCRI + \beta_7 TOTASSETS + \beta_8 EMPLOYEES + \beta_9 PROFITABILITY + \beta_{10} LEVERAGE + \beta_{11} OWNERSHIP + \beta_{12} MEDIA$$

Notice that the β's are not the same for the different models, but are written in the same way for the reason of convenience.

5. Results

5.1 The choice of assurance (Model 1)

To investigate the choice of assurance, the sample of 184 CSR reports is used. This sample is adapted to use by removing the 3% of the sample elements that are identified as outliers in one of the quantitative variables. New statistical information is provided in table 30 of Appendix I.

Firstly, the correlation matrix of the variables, influencing the choice of assurance, is examined. The dependent variable ASS_YESNO is significantly positively correlated with the natural log of total assets (TOTASSETS) and significantly negative correlated with the National Corporate Responsibility Index (NCRI). The Correlation matrix with Pearson Correlation Coefficients for each bivariate correlation is disclosed in Appendix J, due to its magnitude.

The correlation matrix shows a number of high correlations between explanatory variables when looking at the Pearson Correlation Coefficient. The sensitive industry 'Financials' (ICB_8000) correlates significantly with a number of other variables. Financial institutions are known to have high TOTASSETS (financial assets), low PROFITABILITY (high total assets result in a significantly low Return On Assets) and high LEVERAGE (a considerable amount of debt financing). Large companies (high TOTASSETS) correlate significantly with low PROFITABILITY (because the formula Return On Assets), high LEVERAGE, high media visibility (MEDIA) (large companies are more visible to society) and high number of EMPLOYEES (because both are indicators for size). Despite the high correlations, no case of multicollinearity is detected. The Pearson Correlation Coefficient between ICB_8000 and LEVERAGE is 0,714, which is near the detection level of multicollinearity (0,8).

A first binary logistic regression is conducted to investigate the influence of the different variables on the choice of assurance. The primary results of the regression are provided in table 8 below, all output is disclosed in Appendix K. First of all, the goodness of fit of the model is examined. Model 1 is able to classify 68,4% of the sample elements in the right way (Classification Model Block 1), which is only slightly higher than the random classification (65,5%, Classification table Block 0). The -2 Log Likelihood[41] (-2LL) is 206.555. A high -2LL like this is associated with a model of medium quality (De Pelsmacker & Van Kenhove, 2006). The Chi square indicates that the -2LL was 21.443 higher in Block 0 (if no explanatory variable is inserted

[41] The -2 Log Likelihood or -2LL is calculated as follows: -2*Ln(the probability of the observations, given the estimations of the parameters). An ideal model corresponds with a high probability and a log -2LL value (De Pelsmacker & Van Kenhove, 2006, p. 289).

into the model), which is a significant decrease of -2LL (Sig = 0,04). The conclusion is made that the model has better results than a model without explanatory variables: the model has a significant added value. The Nagelkerke R^2 of this model is 15,8%. Model 1 therefore explains 15,8% of the variation of the dependent variable.

Variables in the Equation							
		B	**S.E.**	**Wald**	**df**	**Sig.**	**Exp(B)**
Step 1a	**ICB_0001**	1,395	1,165	1,433	1	0,231	4,033
	ICB_1000	0,33	0,593	0,31	1	0,578	1,391
	ICB_7000	-0,296	0,736	0,162	1	0,687	0,744
	ICB_8000	-0,337	0,803	0,177	1	0,674	0,714
	TOTASSETS	0,372	0,212	3,074	1	0,08**	1,45
	PROFITABILITY	2,091	3,328	0,395	1	0,53	8,091
	LEVERAGE	-0,036	0,036	0,968	1	0,325	0,965
	NCRI	-0,125	0,049	6,534	1	0,011*	0,883
	OWNERSHIP	0,252	0,921	0,075	1	0,784	1,287
	LAPORTA	0,332	0,164	4,113	1	0,043*	1,394
	EMPLOYEES	-0,035	0,173	0,041	1	0,839	0,965
	MEDIA	0,001	0,002	0,752	1	0,386	1,001
	Constant	-2,004	5,284	0,144	1	0,704	0,135

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.1 level (2-tailed).
Table 8: Main statistical results of Model 1

The output of statistical software SPSS indicates that the coefficients of NCRI and LAPORTA are significant at 5% level (Sig. < 0,05). The coefficient of TOTASSETS is significant at 10% level (Sig. < 0,10). When looking at the scope of NCRI and LAPORTA, two contradictions against the expectations from previous research are noticed. NCRI is expected to be a positive influence on the choice of assurance, but the sign of the slope coefficient is negative (B = -0,125). The odd of assuring a CSR report decreases with 11,7% when NCRI increases with one unit (Odds Ratio (-0,125) – 1 = 0,883 - 1). LAPORTA is expected to negatively influence the choice of assurance, but the sign of the slope coefficient is positive (B = 0,332). The odd of assuring a CSR report increases with 39,4% when LAPORTA increases with one unit (Odds Ratio (0,332) – 1). Expectations about the influence of TOTASSETS are confirmed: the odd of assuring a CSR report increases with 45% when TOTASSETS increases with one unit (Odds Ratio (0,372) – 1).

The other outcomes are not significant. The signs of the different slopes indicate that not all expectations about the direction of the influences are confirmed. ICB_7000, ICB_8000, LEVERAGE, OWNERSHIP, EMPLOYEES have a reversed sign.

5.2 The choice of assurance provider: Big4 versus non-Big4 (Model 2)

The deletion of the outliers in the sample has diminished the sample of assurance statements to 116 assurance statements. Movements in the descriptive statistics of the quantitative variables are shown in Appendix L. The correlation table of the new sample , provided in Appendix M, is examined for significant correlations. The dependent variable ASS_BIG4, which encompasses the choice of assurance provider (Model 2), correlates positively with TOTASSETS, MEDIA and EMPLOYEES, all at 5% significance level. LAPORTA is close to the significance level. The associations confirm the expectations of the direction of influence and give an indication of the results of the regression model. The same high correlations between independent variables of Model 1 can be found (supra, p. 46). Although the minimum level of multicollinearity (0,8) has again not been crossed. Highest correlation is between ICB_8000 and LEVERAGE (0,752).

The statistical model used is again a binary logistic regression to investigate the influence of the different factors on the choice between Big4 audit firms and Non-Big4 assurance providers. The goodness of fit indicators are more positive to Model 2 than Model 1. The -2 Log Likelihood is 107.398 and was lowered with 27.277 from Block 0 (The Chi square is significant at Sig. = 0,007). The Nagelkerke R^2 is 30,5%. Model 2 is able to classify 76,7% of the sample elements, although a model without the explanatory variables can classify 73,3% in the right way. The primary results of the coefficients are provided in table 9 and all output content is disclosed in Appendix N.

Variables in the Equation							
		B	**S.E.**	**Wald**	**Df**	**Sig.**	**Exp(B)**
Step 1a	**ICB_0001**	-0,753	0,98	0,591	1	0,442	0,471
	ICB_1000	-0,445	0,833	0,285	1	0,593	0,641
	ICB_7000	0,872	1,243	0,492	1	0,483	2,392
	ICB_8000	-2	1,072	3,479	1	0,062**	0,135
	TOTASSETS	0,433	0,259	2,789	1	0,095**	1,541
	PROFITABILITY	2,117	5,684	0,139	1	0,71	8,302
	LEVERAGE	0,054	0,06	0,801	1	0,371	1,055
	NCRI	-0,07	0,063	1,216	1	0,27	0,932
	OWNERSHIP	0,984	1,388	0,503	1	0,478	2,676
	LAPORTA	0,49	0,233	4,405	1	0,036*	1,632
	MEDIA	0,011	0,006	3,26	1	0,071**	1,011
	EMPLOYEES	0,055	0,218	0,063	1	0,802	1,056
	Constant	-9,265	6,858	1,825	1	0,177	0

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.1 level (2-tailed).

Table 9: The main statistical results of Model 2

The slope coefficient of LAPORTA is significant at 5% level (Sig. < 0,05). The slope coefficients of ICB_8000, TOTASSETS and MEDIA are significant at 10% level (Sig. < 0,1). Surprisingly, the positive association between EMPLOYEES and the dependent variable is not resulting in a significant slope coefficient. NCRI, which is a significant factor in the choice of assurance, is not concluded to be of significant influence on ASS_BIG4. Companies that are not situated in the category '8000 Financials' are concluded to have 86,5% higher odd to choose a Big4 assurance provider, which is conflicting the expectations. The odd to choose a Big4 assurance provider increases with 54,1% when the variable TOTASSETS increases with one unit. LAPORTA's direction of slope is again a contradiction against the expectations. The odds to choose a Big4 assurance provider increases with 63,2% if LAPORTA increases with one unit. Furthermore, MEDIA is also a positive influence on the choice of assurance provider. The odds to choose a Big4 assurance provider increases with 1,1% when the variable MEDIA increases with one unit. The slope signs of ICB_0001, ICB_1000, NCRI and OWNERSHIP are also contradictory to the expectations.

5.3 The choice of assurance provider: auditor – consultant – stakeholder – rating agency – none (Model 3)

The last main hypothesis is the choice of assurance provider divided over 5 categories: auditors, consultants, stakeholders, rating agencies or no assurance. The sample used is the same as the one used to investigate the choice of assurance, namely 177 CSR reports. The reports without an assurance statement are included to represent to the lowest quality assurance provider: no assurance provider. The correlation matrix, provided in Appendix O, is the same as the matrix used to analyse the choice of assurance, except for the associations with the new dependent variable ASS_LIKERT. The dependent variable is again positively correlated with TOTASSETS and is negatively correlated with NCRI, although previous research suggested that the association would be positive.

Hypothesis 3 is formalized into an ordinal logistic regression. The dependent variable ASS_LIKERT consists of 5 values, ordered on a LIKERT 5-scale. The value 'Auditor' is the highest value (5), followed by 'Consultants' (4), 'Stakeholder' (3), 'Rating agency' (2) and 'None' (1). -2 Log Likelihood is 367,83, lowered with 30,82 from Block 0 (The Chi square is significant at Sig. = 0,002). The Nagelkerke R^2 is 17,9%. The primary results are provided in table 10, all statistical output is disclosed in Appendix P.

Parameter Estimates								
							95% Confidence Interval	
		Estimate	Std. Error	Wald	Df	Sig.	Lower Bound	Upper Bound
Threshold	**[ASS_LIKERT = 0]**	3,578	4,83	0,549	1	0,459	-5,888	13,045
	[ASS_LIKERT = 1]	3,775	4,831	0,611	1	0,435	-5,693	13,243
	[ASS_LIKERT = 2]	3,803	4,831	0,62	1	0,431	-5,666	13,271
	[ASS_LIKERT = 3]	4,37	4,833	0,817	1	0,366	-5,103	13,843
Location	**ICB_0001**	0,575	0,807	0,507	1	0,476	-1,007	2,156
	ICB_1000	0,235	0,54	0,189	1	0,664	-0,823	1,292
	ICB_7000	-0,006	0,665	0	1	0,993	-1,31	1,298
	ICB_8000	-0,756	0,72	1,104	1	0,293	-2,167	0,655
	TOTASSETS	0,4	0,193	4,301	1	0,038*	0,022	0,778
	PROFITABILITY	1,703	2,916	0,341	1	0,559	-4,012	7,417
	LEVERAGE	-0,025	0,033	0,557	1	0,455	-0,09	0,04
	NCRI	-0,113	0,043	6,899	1	0,009*	-0,197	-0,029
	OWNERSHIP	0,463	0,819	0,32	1	0,572	-1,142	2,069
	LAPORTA	0,369	0,148	6,211	1	0,013*	0,079	0,659
	MEDIA	0,003	0,002	3,184	1	0,074**	0	0,006
	LOG_EMPLOYEES	-0,051	0,155	0,108	1	0,742	-0,355	0,253

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.1 level (2-tailed).

Table 10: The main statistical results of Model 3

Four slope coefficients are significant: TOTASSETS, NCRI, and LAPORTA at 5% significance level and MEDIA at 10% significant level. LAPORTA and NCRI have again contradictory sign results. The influence of LAPORTA is concluded to be positive on the ordered choice of assurance provider: the higher the LAPORTA value of a country, the higher the probability that the chosen assurance provider is of high quality. However, the higher the NCRI value of a country, the lower the chosen assurance provider's quality is. TOTASSETS has again a positive influence on the dependent variable. These results are in line with the results of the first hypothesis. The categorization of the sample into the values of the dependent variable is similar for both hypotheses. The value 0 of variable ASS_YESNO matches the value 0 of variable ASS_LIKERT, the value 1 or variable ASS_YESNO matches the other values of variable ASS_LIKERT. Furthermore, the slop coefficients of ICB_7000, ICB_8000, LEVERAGE, OWNERSHIP and EMPLOYEES have again a reversed sign.

5.4 Robustness check

5.4.1 Auditor versus consultant

Both samples contain assurance statements of 7 rating agencies and only one stakeholder assurance provider. These amounts are negligible. Because of this reason, and because of the extensive research

covering the distinction between auditors and consultants, a new dependent variable is composed. The new variable ASS_AUDCONS equals to 1 if the assurance provider is an auditor and equals to 0 if the assurance provider is a consultant. A new binary logistic regression is conducted on a sample of 108 assurance statements. A new hypothesis is formulated:

$$ASS\_AUDCONS = \alpha + \beta_1 ICB\_0001 + \beta_2 ICB\_1000 + \beta_3 ICB\_7000 + \beta_4 ICB\_8000 + \beta_5 LAPORTA + \beta_6 NCRI + \beta_7 TOTASSETS + \beta_8 EMPLOYEES + \beta_9 PROFITABILITY + \beta_{10} LEVERAGE + \beta_{11} OWNERSHIP + \beta_{12} MEDIA$$

The goodness of fit of the model has changed considerably. -2 Log Likelihood is 90.032, which is lower than the -2LL of Model 2, but the decrease of 16,371 is not significant anymore (Sig. = 0,175). The classification table indicates that 80,6% of the sample elements are rightly classified, which is the same percentage as for a model without explanatory variables. The model is therefore concluded to be of little significance The new Nagelkerke R^2 is 22,4%, which is lower than the R^2 of Model 2, but higher than the R^2 of Model 3. The main results of the coefficients are provided in table 11, all statistical output is disclosed in Appendix Q.

Variables in the Equation							
		B	**S.E.**	**Wald**	**df**	**Sig.**	**Exp(B)**
Step 1a	**ICB_0001**	0,838	1,228	0,466	1	0,495	2,312
	ICB_1000	-0,3	0,886	0,115	1	0,735	0,741
	ICB_7000	0,852	1,292	0,435	1	0,51	2,345
	ICB_8000	-1,33	1,218	1,192	1	0,275	0,265
	TOTASSETS	0,312	0,335	0,866	1	0,352	1,366
	PROFITABILITY	-0,85	6,113	0,019	1	0,889	0,427
	LEVERAGE	0,065	0,082	0,638	1	0,425	1,067
	NCRI	-0,009	0,072	0,016	1	0,898	0,991
	OWNERSHIP	1,606	1,598	1,01	1	0,315	4,982
	LAPORTA	0,388	0,259	2,257	1	0,133	1,475
	MEDIA	0,01	0,007	2,539	1	0,111	1,011
	EMPLOYEES	0,081	0,239	0,116	1	0,733	1,085
	Constant	-9,82	9,008	1,188	1	0,276	0

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.1 level (2-tailed).

Table 11: The main statistical results of robustness check with variable 'AUDCONS'

When comparing the new slope coefficients with those of Model 2, some important differences are noticed. The four significant slope coefficients of ICB_8000, TOTASSETS, LAPORTA and MEDIA are not significant anymore. The inclusion of stakeholders and rating agencies has a considerable effect, the sample values for auditors and consultants are very close to each other. The results of the robustness check indicate that the models are subject to volatility.

5.4.2 Industry

The variable INDUSTRY is only in one case partially significant: ICB_8000 is significant at 10% level in Model 2 (ASS_BIG4). The next robustness checks controls if a dummy variable for sensitive industries has a significant influence on the three models. The variable ICB_SENS equals to 1 if a company in the sample belongs to categories ICB_0001, ICB_1000, ICB_7000 or ICB_8000 and equals to 0 if not. The three models are conducted with the new variable. The main results are disclosed in Appendix R.

When rerunning Model 1, the same variables are significant. The new variable ICB_SENS is not significant, only the positive sign is conform the expectations. The Nagelkerke R^2 decreases to 14,1%. When putting the new variable into Model 2, the variables TOTASSETS, LAPORTA and MEDIA remain significant. The significance of ICB_8000 is now a part of variable ICB_SENS, which is again not significant and the sign of the slope coefficient is negative which conflicts with the expectations. The Nagelkerke R^2 decreases to 24,8%. Lastly, Model 3 has been conducted again, leading to the same significant variables and no significant ICB_SENS. The sign of the variable is positive. One other variable, LEVERAGE, is surprisingly significant at 10% level, although not being significant in the original model. The sign of the slope coefficient is contradictorily negative. Looking at the correlation matrix (Appendix R), LEVERAGE is significantly positively correlated with ICB_SENS (38,6%) at 1% level. The correlation could be the reason for the increased significant level of LEVERAGE. The Nagelkerke R^2 of Model 3 decreases to 16,5%.

The variable INDUSTRY is concluded to be of little significant influence on the dependent variables and the sample. Some volatility is noticed when introducing the new variable ICB_SENS.

5.4.3 Country

Two robustness checks are provided on national level. Firstly, the three regression models are repeated to investigate the influence of three low-producing countries: Greece, Luxembourg and Ireland. The three countries have each only one assured CSR report in the sample. The robustness of the models is checked by removing the sample elements from these countries. The three models are conducted again on the new sample of 173 CSR reports and 114 assurance statements (The sample element of Luxembourg has already been removed by the outliers modification). The main results are disclosed in Appendix S. The Nagelkerke R^2 increases for every model (to 16,8% for Model 1, to 32,1% for Model 2, to 18,5% from Model 3). In Model 1, NCRI is significant on a more precisely level (1%) and LAPORTA is not significant anymore. In Model 2 and Model 3, respectively ICB_8000 and NCRI are significant on a more precisely level. The removal of the three countries results in an increase of the model significances and provides regression models of better quality.

Secondly, the models are examined on the influence of removing one of the national variables. Two national variables are involved in the original regression models (LAPORTA and NCRI), which could distort the outcome of the models. The three models are again conducted without variable LAPORTA. The Nagelkerke R^2 decreases in each case (to 12,8% for Model 1, to 25,8% for Model 2, to 14,3% for Model 3). No significant changes are noticed on the other explanatory variables. Additionally, the three models are conducted without the variable NCRI. The Nagelkerke R^2 shows again decreasing results (to 10,9% for Model 1, to 29,3% for Model 2, to 13,9% for Model 3). The removal of NCRI has no significant influence on the other variables in Model 1 and Model 2, except on a significant constant in Model 2. The influence on Model 3 results in an insignificant variable MEDIA and, surprisingly, in the significance of all the dependent values on a 99% significance level. The main results of the models without one of both variables are disclosed in Appendix S. By this robustness check, the conclusion can be made that the national variables can coexist in the models, although small influences on the regression outcomes.

5.4.4 Size

The next robustness check is similar to the previous, by investigating the influence of both variables of size (TOTASSETS and EMPLOYEES) separately. Each variable will in turn be removed, the main results are disclosed in Appendix T. By removing the variable EMPLOYEES, no significant modifications are concluded on the other variables. This also the case when removing the variable TOTASSETS, except the insignificance of ICB_8000 in Model 2. The Nagelkerke R^2 decreases in both cases of removals[42]. The significance of ICB_8000 in the original model 2 can concluded to be partially operated by the variable TOTASSETS. When looking at the appropriate correlation matrix (Appendix M), both variables are significantly positively associated with each other (53%), which can explain the modification of ICB_8000 when removing the variable TOTASSETS. The variable EMPLOYEES remains of insignificant influence on the dependent variables in this research design.

5.4.5 Financial variables

The last robustness check follows the same method as above checks, now conducted on the financial explanatory variables (PROFITABILITY and LEVERAGE). The main results are provided in Appendix U. When removing the variable LEVERAGE, the only change consists of the insignificance of TOTASSETS in Model 1. The correlation matrix of Model 1 (Appendix J) indicates that TOTASSETS is significantly positively associated with LEVERAGE (64,2%). No changes has been founded in Model 2 and 3. When removing the variable

[42] When removing the variable EMPLOYEES, the Nagelkerke R^2 decreases to 15,7% for Model 1, to 30,4% for Model 2 and to 17,8% for Model 3. When removing the variable TOTASSETS, the Nagelkerke R^2 decreases to 13,5% for Model 1, to 27,4% for Model 2 and to 17,8% for Model 3.

PROFITABILITY, the variable TOTASSETS is again insignificant, but in Model 2. This is also explained by looking at the correlation matrix of Model 2 (Appendix M), which indicates a significant negative association between TOTASSETS and PROFITABILITY (-36,5%). An uniform decrease of the Nagelkerke R^2 is concluded for both removals[43]. Except for a number of changes due to the high associations between the explanatory variables, the conclusion is made that both financial variables can be inserted into the models at the same time and without significant influence on each other. Both variables remain of insignificant influence on the dependent variables in the original models.

[43] When removing the variable LEVERAGE, the Nagelkerke R^2 decreases to 15,1% for Model 1, to 29,6% for Model 2 and to 17,6% for Model 3. When removing the variable PROFITABILITY, the Nagelkerke R^2 decreases to 15,5% for Model 1, to 30,4% for Model 2 and to 17,7% for Model 3.

Discussion

Assuring the stand alone Corporate Social Responsibility (CSR) report is a fairly recent phenomenon, but with a rapidly growing market (KPMG, 2008; Corporate Register, 2008). The external assurance is provided by an independent third party to improve the credibility of the report and the related stakeholder confidence in the reporting company (Owen & O'Dwyer, 2004). The independent third party is the subject of this thesis, because of his wide variety in appearance. This thesis aims to develop an understanding of the choice of assurance provider by collecting all information on the different types of assurance providers and by analyzing the reporting companies that appoint a specific assurance provider. The thesis thereby extends the prior research which is divided among a high number of researchers (e.g. O'Dwyer and Owen, 2004, 2005, 2007; Deegan et al., 2006; Perego, 2009; Simnett et al., 2009).

The sample used to assess the findings, both in literature and by statistical methods, aims to cover the 'best practice' sustainable leaders in Continental Europe. Three Sustainability indices[44] that are based on the twelve original Eurozone countries[45] are combined to result in a sample of 184 CSR reports out of 227 sustainable companies. Within this sample, 120 assurance statements are founded, that are produced by different assurance providers. The conclusions of this discussion are made based on numerical evidence of the sample (Part 1) and on statistical investigation of the sample (Part2).

Part 1 of this thesis covers the collection and the analysis of the young and diffused knowledge on assurance statements and the different types of assurance providers. Three main assurance providers are identified: auditors (Big4 audit firms or other), consultants (broadly or specifically specialised) and stakeholders. These primary assurance providers correspond to a certain level with three approaches identified by FEE (2002), as there are respectively the accountancy approach, the consultancy approach and the social audit approach. For each type of assurance provider, a profession profile is established, which is summarized in the following paragraphs.

The financial auditor is most frequently appointed by a reporting company: 91 out of 120 assurance statements are produced by the auditor, 90 of them by a Big4 audit firm. The main reasons to appoint an auditor assurance provider are the understanding of the basic principles of financial audit, the independence and integrity of the auditor and the perceived credibility (Dixon et al., 2004; Simnett et al., 2009). The auditor uses a structured (Park, 2004) and cautious (Owen & O'Dwyer, 2004; O'Dwyer and

[44] The used sustainability indices are the Dow Jones Sustainability Eurozone Index, the FTSE4GOOD Europe Index and the Euro Stoxx Sustainability Index.

[45] The twelve countries, used in this sample, are Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, The Netherlands, Portugal and Spain.

Owen, 2005; Deegan et al., 2006) approach to secure the integrity of his audit firm, which results in providing only a moderate level of assurance on the CSR reports. Auditors tend to omit the term 'truly and fairly' from the assurance statement and do not investigate beyond the scope of the CSR report. Additionally, the financial auditor is assisted by global professional standards (Simnett et al., 2009); the most frequently mentioned standard is the ISAE 3000. The approach of an auditor is fairly uniform in style and structure and is based on the analysis of risk, the collection of evidence and the investigation of the consistency of the provided information (Park, 2004; Owen & O'Dwyer, 2004). This uniformity is strongly visible in the produced assurance statements[46]. One important disadvantage, besides the cost, is the notion of professional capture: a reporting company may appoint an auditor for his perceived competencies, although he may not have specialised CSR expertise (Power, 1991).

The second most frequently appointed assurance provider is the consultant (in 21 cases). The profession consists of a variety of services, offering global or local services (Simnett et al., 2009) with broad or CSR specialised expertise (Maltby, 1995). No common culture can therefore be detected (Maltby, 1995). The consultant follows a strategic (O'Dwyer & Owen, 2007) and evaluative (Owen & O'Dwyer, 2004) approach, which varies over the different firms. International consultancies as Bureau Veritas and SGS tend to follow the auditor's approach to demonstrate their competencies and capabilities. (infra, p. 42). Contrarily, a consultant is more likely to conclude the assurance statement in a positive way (a reasonable level of assurance) and to give an opinion and recommendations to the reporting company. The appointment of a consultant as assurance provider is associated with a higher probability of managerial capture: assurance may be subject to the dominance of the management and may become more a public relations medium (Ball et al., 2000).

Four broad categories of stakeholder involvement are detected (Park, 2004): communication with main stakeholders, opinion leaders, stakeholder panels and NGOs. The last two are considered as assurance providers. One assurance statement by a stakeholder is founded in the sample, although stakeholders are frequently involved in the assurance process. Stakeholders tend to follow a normative approach, by summarizing the hot topics and mentioning where more information is needed. Assurance services by stakeholders are not likely to increase the perceived credibility of the stakeholders.

[46] In 98% of the assurance statements produced by auditors, the statement is constructed as follows: (addressee), responsibility reporting company, responsibility client, scope, approach, (negative) conclusions and (recommendations). The concepts between brackets have a lower percentage of appearance.

A residual category consists of rating agencies, certification bodies, rankings and indices. Visualisation of the reporting company's performance is the main output, ranging from disclosing the name of the index or label to providing graphs to cover the company's performance at a glance. Only rating agencies can be perceived as assurance provider (however of low quality), because the agencies tend to provide information on reporting criteria and performance besides the visual tools.

Auditors are identified as the highest quality of assurance providers, followed by consultants. This conclusion is based on an analysis of the content of assurance statements[47]. A high quality assurance statement is significantly associated with an auditor assurance provider (Mock et al., 2007; Perego, 2009). The quality of stakeholders and rating agencies is perceived as the least. However, the consideration is made, based on the content analysis of the sample, that the quality of assurance statements of auditors and consultants are converging. As mentioned before, international consultancy firms are more frequently following the assurance approach of an auditor. The standard ISAE 3000, which focuses on financial auditors, is mentioned in 3 consultant assurance statements. Notions of both scope and assurance are disclosed in 93% of the cases, which is near the auditor's level. In two cases, the consultant provides a moderate level of assurance, which is concluded by Mock et al. (2007) as an indication of a 'good' assurance statement. Furthermore, the auditor provides recommendations in 50% of the identified assurance statements, indicating that the recommendations approach of consultants is perceived as adding value to the statement. As the working method of both types of assurance providers are converging, the quality of its statements are converging. Consultants add to this finding by frequently disclosing information on their firm, independence and competencies, and thereby confirming their appropriateness.

Previous research does not reach a consensus whether the provision of recommendations increases the quality of an assurance statement (Zadek & Raynard, 2004; Mock et al, 2007; Perego, 2009) or endangers the independence of the assurance provider (Owen & O'Dwyer, 2004; GRI, 2006). Not only consultants provide recommendations (68% of the examined cases), auditors also tend to provide this service (50%). The importance of being perceived as independent is concluded to be of less relevance than in financial assurance services: the benefits of providing recommendations are perceived to be higher than the costs.

[47] The appearance of the following concepts increase the quality of the assurance statement: the assurance of all categories, the assurance of both qualitative and quantitative data, the used symbols, the notion of restricted usage, the provided recommendations, the disclosure of the used procedures and the disclosure of the used framework (Mock et al., 2009). O'Dwyer and Owen (2005) established a more detailed framework of quality criteria, which is also used by Perego, 2009).

Lastly, three standards are considered useful when producing assurance statements on CSR reports. The GRI guidelines and reporting criteria are used by both auditors and consultants, although being initially established to support companies in the CSR reporting process. The guidelines provide suitable reporting criteria against which the performance of the company can be measured by auditors, consultants and the reporting companies. The ISAE 3000 standard provides support to auditors in assignments of non-financial assurance. Consultants already detected and started to use this standard too. The last standard, AA1000AS, is established to assist any assurance provider in CSR assurance assignments. This standard is used by both auditors and consultants and has currently the most appropriate format to be a generally accepted standard in future.

Due to this variety in types of assurance provider, the choice of assurance provider is not an evident decision, and will significantly affect the outcome of the assurance process. How does a company choose? Part 2 investigates whether this choice of assurance provider is affected by external and internal characteristics of the reporting company. Two researchers (Perego, 2009; Simnett et al., 2009) performed the same statistical research. Both focused on the influence of national variables on a global sample to examine the choice of assurance provider. The objection is, however, made that a global sample is too heterogeneous to investigate this choice, because the differentiation in frequency of reporting between Europe and the United States in particular (supra, p. 5 & 23). Furthermore, the choice of assurance is considered to be influenced by more criteria than the nationality of the reporting company. This thesis aims to complete this research by using a homogeneous sample of Continental European companies and by adding industrial and business variables into the research design.

A number of national, industrial and business variables that can be expected to predict the outcome of this decision, are identified in previous research. Using the described sample of continental European sustainability leaders, the 120 detected assurance statements and the corresponding reporting companies are examined on the assurance providers and the necessary characteristics of the company. The following variables are used to assess the choice of assurance provider: industry, nationality (approximated by the La Porta Index and the National Corporate Responsibility Index), size (approximated by the natural log of total assets and the natural log of the number of employees), financial variables (the Return on Assets and the leverage), media visibility and the ownership structure.

Before investigating the choice of assurance provider, the initial choice whether or not to assure the CSR report is examined (Park & Brorson, 2005; Kolk & Perego, 2008). Since this decision is still voluntary, a reporting company has to compare the costs and benefits of an external assurance. The choice of assurance

(Model 1) is investigated with the same national, industrial and business variables and the same Continental European sample to fill the gap in European research and set the foundation for the examination of the choice of assurance provider. The descriptive analysis of this model suggest that the identified 'sensitive industries' are caught up by the other industries. Seeking assurance on CSR reports is not only a trend for environmental and social intensive companies anymore.

A dummy that equals to 1 if an assurance statement is founded in the CSR report and to 0 if not, is used as dependent variable to research the choice of assurance. A binary logistic regression is conducted with this dependent variable and the identified explanatory variables. The statistical output of Model 1 demonstrates that three variables have a significant influence on the choice of assurance. The significance of the variable TOTASSETS indicates that large companies are more probable to appoint any assurance provider. The national variables (LAPORTA and NCRI) are also significantly influencing the choice of assurance, although in the opposite direction than expected. These outcomes do not change drastically if one of the national variables is removed as robustness check. The sign of the variable LAPORTA does not correspond with previous research, except for the second view on the influence of nationality by Choi and Wong (2007), in which the researchers stated that weak legal environments are failing to provide 'credible disciplinary mechanisms' for auditors. Companies in strong legal environments are more likely to request external assurance. The reversed sign of variable NCRI is also contrary to previous research and is even opposed to the criteria of the National Corporate Responsibility Index[48]. Subsequently, hypothesis 1 is only partially accepted.

Due to the absence of a generally agreed approach, assurance services appear in a variety of formats and quality. Choosing the right format of assurance statement is choosing the appropriate assurance provider. External arguments to choose an assurance provider are: key stakeholders, degree of added value, highest perceived credibility, cost, expertise and objectivity (ENDS directory, 2003; Knechel et al., 2006). As already mentioned, two researchers (Perego, 2009; Simnett et al., 2009) performed statistical analyses on the same assumption. The aim of this thesis is to complete their research. The choice of assurance provider is covered by two methods. Model 2 investigates the influence of the identified explanatory variables on the choice whether to appoint a Big4 audit firm as assurance provider or not. Model 3 consists of a quality hierarchy of assurance providers and examines the influence of the same explanatory variables on the choice of assurance provider. Both models are conducted on the continental European sample.

[48] One of the criteria to establish the National Corporate Responsibility Index is 'the strength of auditing and accounting standards (AccountAbility, 2005, p. 99).

Model 2 describes the choice of assurance provider in a dummy variable, that equals to 1 if the assurance provider is a Big4 audit firm and to 0 if not. The Big4 audit firm is most frequently appointed in general, in nearly every industry and every country. Appointing a Big4 audit firm as assurance provider is again not solely for sensitive industries. A binary logistic regression is conducted to investigate which companies choose a Big4 audit firm as assurance provider. The statistical output shows that four explanatory variables are significantly influencing this decision. Larger companies are more likely to appoint a Big4 assurance provider, which is conform the expectations. Additionally, the higher the media visibility, the higher the likelihood of choosing a Big4 assurance provider. Both characteristics of the reporting company reflect the perceived visibility to the stakeholders. The variable LAPORTA has again a reversed sign (opposite to the previous research), which again confirms the second view of Choi and Wong (2007). Reporting companies in strong legal environments are more likely to appoint a Big4 audit firm, because the credible disciplinary mechanisms for the auditors do exist. The industry variable ICB_8000 is significant as well, but is concluded to have a negative influence on the decision. When looking at the descriptive analysis of Model 2, the majority in Big4 assurance statements in category ICB_8000 can be noticed. The financial industry contains, however, the largest absolute amount of Non-Big4 assurance statements, which could have influenced the outcome of the statistical research. The conclusion is made on the research of Model 2 that hypothesis 2 is also only partially accepted.

Model 3 provides a more differentiated dependent variable to cover the variety in types of assurance provider. Previous research founded a significant difference in assurance quality between auditors and consultants (Mock et al., 2007; Perego, 2009). Assurance by stakeholders is considered to be of lower quality than the first two categories of assurance providers. This thesis adds to the research by taking rating agencies in account, which provide the lowest quality of assurance statement (providing merely visual information and statements on the reporting criteria). The residual category is ‘no assurance provided’. The five different categories in the quality hierarchy are composed into an ordinal Likert 5 variable as dependent variable, in order of auditor – consultant – stakeholder – rating agency – none (in decreasing order of quality).

An ordinal logistic regression is conducted with the identified explanatory variables and the Likert 5 dependent variable to cover Model 3. Variables TOTASSETS and MEDIA demonstrate the same significant influence on the choice of assurance provider as in Model 2. The variable LAPORTA has a negative sign in line with second view of Choi and Wong (2007). The variable NCRI is again contrary to the expectations,

without explanation for this phenomenon in previous research. Hypothesis 3 is again only partially accepted.

Overall, a number of contradictions to the previous research are found in the statistical outputs of the models. This thesis concludes to three possible explanations for these contradictions. Firstly, the used sample is little comparable to the global samples of the previous research. The homogeneity of the continental European sample results in another relationship between the involved countries, contrary to the heterogeneity of a global sample. Additionally, all continental European countries are stakeholder-orientated, as investigated by Simnett et al. (2009). The national results in this research are more likely to be closer to each other, which could lead to another form of relationship. This homogeneity could also result in significantly other relationships with the other variables.

Secondly, the consideration is already made that the quality of output between auditors and consultants is converging (supra, p. 57). This conclusion from the literature review can be completed with the statistical conclusions. When composing a new binary logistic regression to investigate the choice between auditors and consultants[49], none of the variables is significant. No difference between the characteristics of the reporting companies can consequently be detected. These results suggest that there is no difference in perceived quality between auditors and consultants. Additionally, this finding creates the expectation that the convergence can significantly influence the outcome of the statistical research. Lastly, one can expect that the limited amount of sample elements (only 184 CSR reports and 120 assurance statements detected) could result in less significant slope coefficients and the distortion of the outcomes by single sample values.

Besides the variety in assurance providers, the reporting companies are concluded to be varied as well. When including the categorization of reporting companies by ENDS Directory (2003), the following composition of the findings can be made. Firstly, confirmation seekers (mostly large and visible companies) focus mainly on their shareholders and are looking for straightforward verification. They find this type of assurance with auditors, which perform this assignment in a structured way by using the techniques from financial audit. Secondly, active learners tend to look for an added value in the assurance process, like constructive feedback and expert advice. Consultants can provide this type of assurance through recommendations and a thorough evaluation of the company's performance. Lastly, crowd pleasers focus on receiving confirmation by the public, which can be supported by the assurance of a stakeholder.

[49] The new dependent variable (AUDCONS) equals to 1 if the assurance provider is an auditor and equals to 0 if the assurance provider is a consultant.

Part 1 of this thesis adds to the prior research by collecting all relevant descriptive research on CSR assurance statements and assurance providers and by bundling this information to a clear and coherent explanation of the different assurance providers. The different profession profiles can be used as a supporting tool for reporting companies, to choose the appropriate assurance provider (with the complementary assurance format and quality), and as a benchmark tool for assurance providers. Part 2 of this thesis adds to the prior research by statistically investigating the choice of assurance provider on a homogeneous continental European sample with an extensive amount of variables. The results of this research can be used as a marketing tool for assurance providers.

Conclusions

The main conclusions of this thesis are summarised as follows. The choice of assurance provider is not an obvious decision. The voluntary nature and the absence of a generally agreed approach result in a variety of entities, that are providing assurance services to reporting companies. Subsequently, an appropriate assurance provider for every reporting company does exist. Following research questions are answered in this thesis: Which entities are providing assurance statements on CSR reports of the reporting companies? What are the differences between the assurance providers in terms of nature, approach and output? Does a difference in quality exist between the types of assurance providers? Can an investigation of the national, industrial and business characteristics of the reporting company predict the choice of assurance provider?

Three main types of assurance providers are identified: auditors, consultants and stakeholders. Auditors generally follow a structured and cautious approach, which is strongly related to the financial audit approach. Consultants focus on providing value to the reporting company and the stakeholders, in terms of recommendations and opinions. The two main forms of stakeholder engagements are stakeholder panels and NGOs as assurance providers, but both tend to follow a normative approach. Previous research agreed that there is a quality difference between assurance statements of auditors, consultants and stakeholders, in decreasing order of quality.

This thesis aims to investigate if the characteristics of the reporting companies could predict the company's choice of assurance provider. Nationality and media visibility are concluded to be of most influence on this decision, although in opposite direction than expected from previous research. Two main conclusions are made based on the findings. Firstly, the international results of previous researchers are not representative to continental Europe. Subsequently, one has to be careful with generalisation. Secondly, the quality of approach and output between auditors and consultants are converging. This makes it difficult to the reporting companies to choose between them.

Biggest limitations to this thesis are the nature of the sample and the data examined. A reporting company has to publish a CSR report on the corporate website or in the e-database Corporate Register to be included in this sample. The data collection is limited to the published data on corporate websites, CSR reports and annual financial reports. Furthermore, all factors that relate to human characteristics, like the management's decision making, are excluded from the list of variables, due to the unavailability of the data or the impossibility to capture the information into quantitative variables. Lastly, the results of the research are restricted to the limited amount of sample elements, which is now focused on the sustainable leaders in

continental Europe. The access to an international and dependable CSR database is necessary to capture the full CSR assurance market.

Due to the recent nature of assurance statements, a considerable amount of research perspectives are open for investigation. One dimension is the dynamics of the choice in assurance provider, which could be investigated by the collection of CSR reports over a number of years. An example of research angle could be the assurance provider switch, following the corporate governance requirements to financial audit. The constraints on the influencing human factors should be removed to fully investigate the choice of assurance provider. Furthermore, future research could examine if the involvement of the independent board members of the reporting companies influences this decision. Lastly, one can research how the issuance of an assurance statement influences the reaction of the stakeholders (in terms of better financial ratings, higher market value, ...).

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Appendices

Appendix A: Example of an assurance process

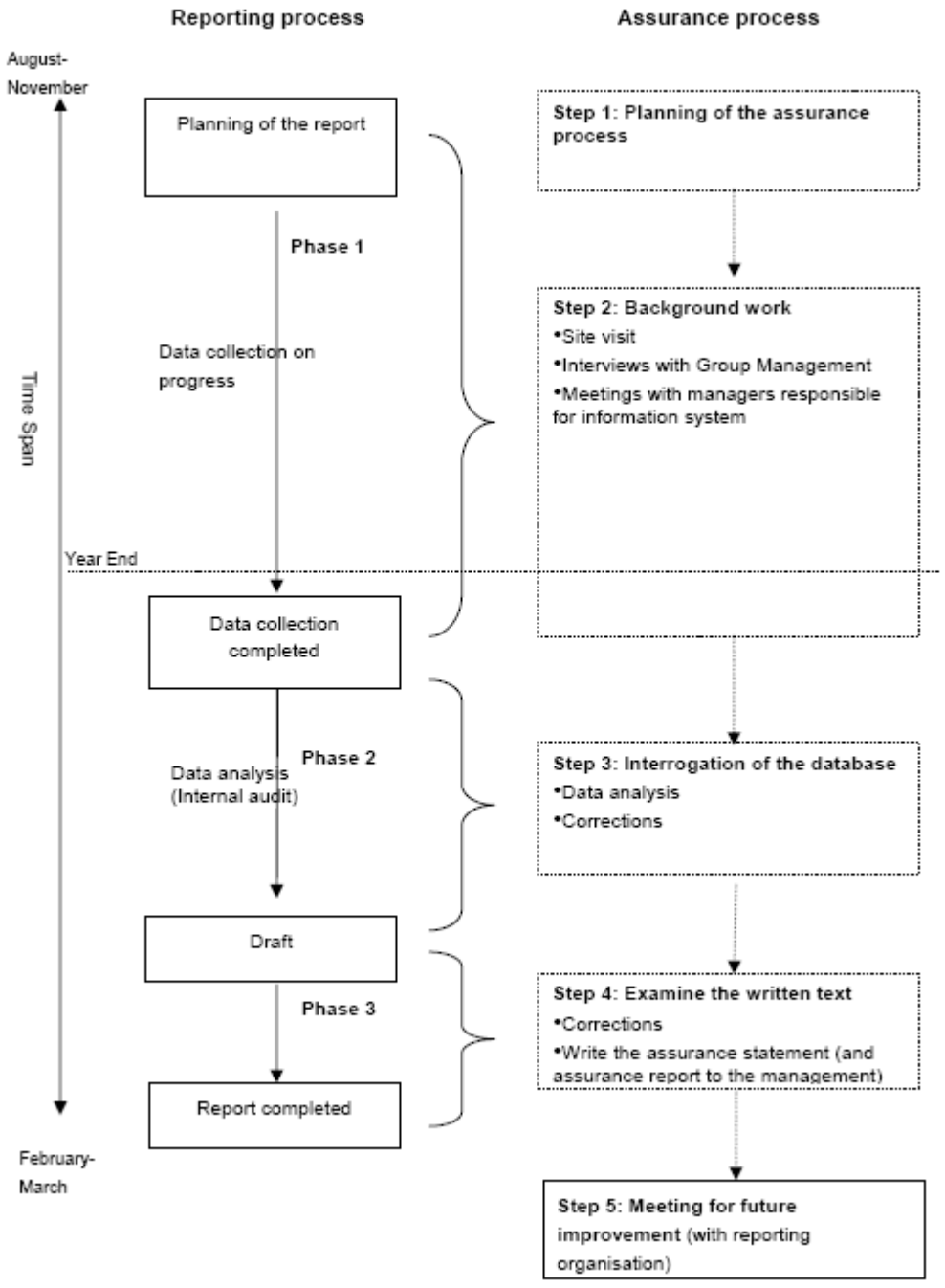


Figure 8: Example on how the assurance process would be along the timeline of reporting (Park, 2004, p. 49)

Appendix B: Example of a 'best practice' assurance statement

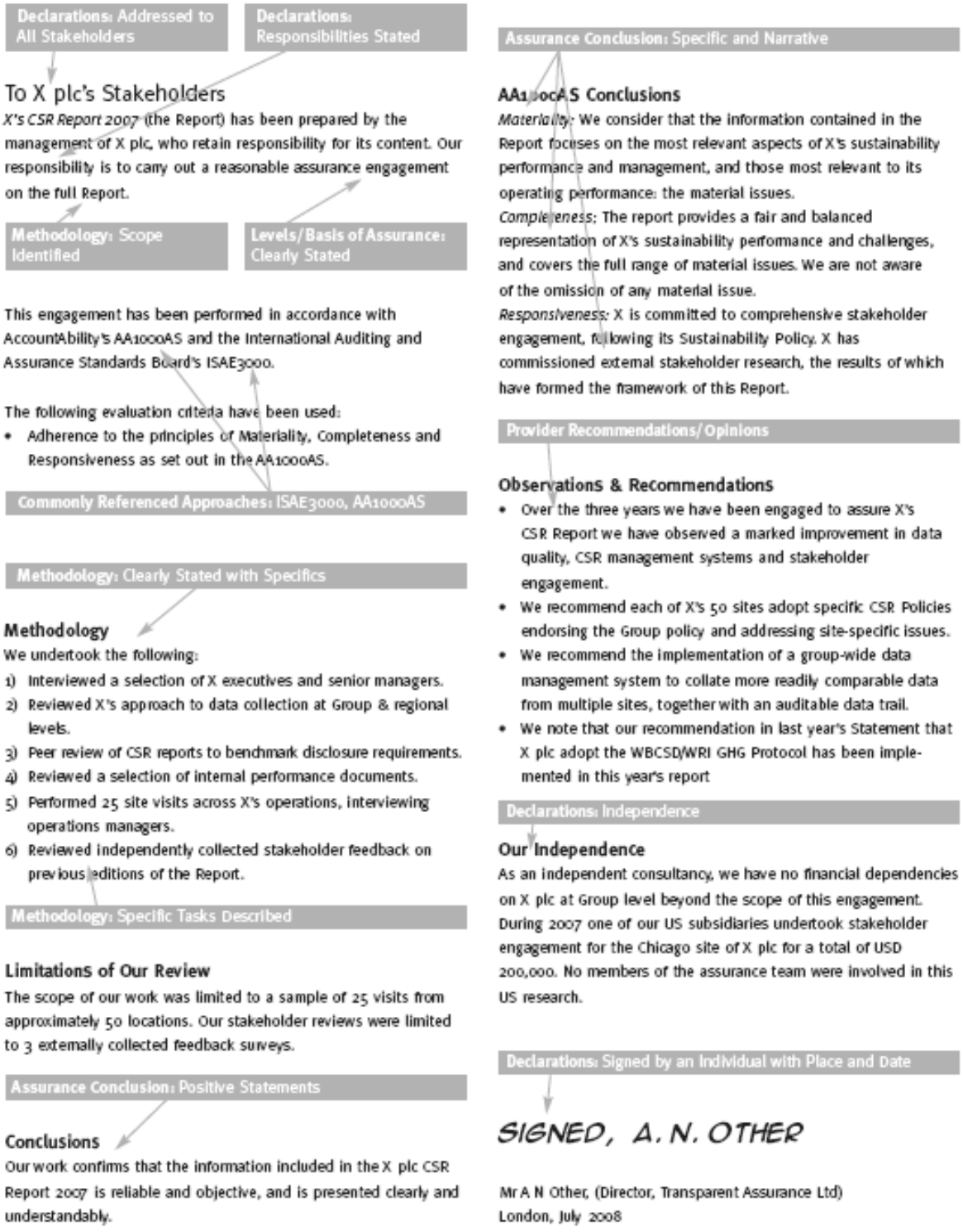


Figure 9: An example of a 'best practice' assurance statement (Owen & O'Dwyer, 2005, p.19)

Appendix C: A general framework of the necessary characteristics of environmental auditors.

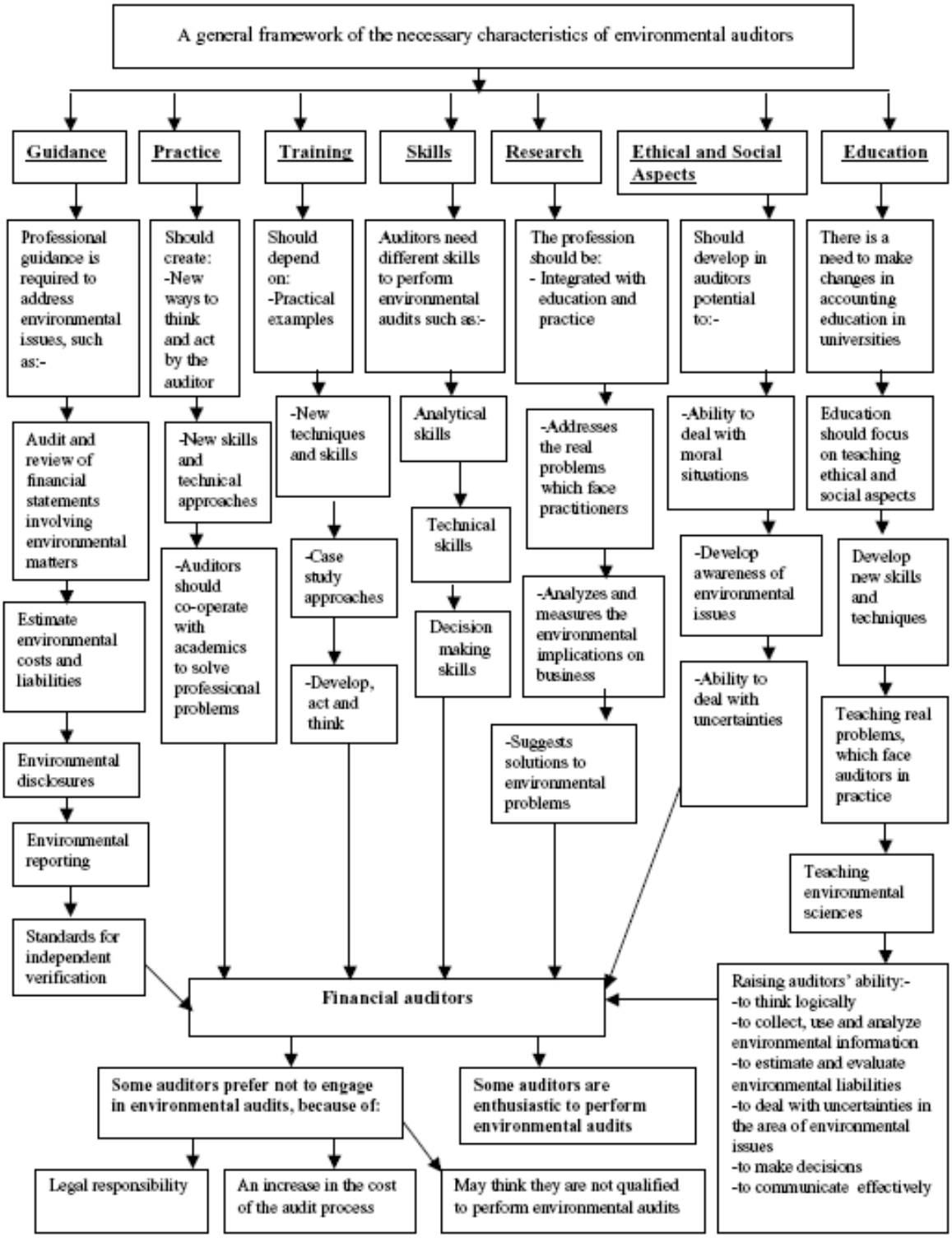


Figure 10: A general framework of the necessary characteristics of environmental auditors (Dixon et al., 2004, p. 133)

Appendix D: Indicators for content analysis of assurance statements, following the framework of O'Dwyer and Owen (2005)

Categories (guidelines)	**Definition**
***Category "reporting format"* (*rep*):**	
Title (FEE, GRI)	Title of the assurance statement
*Addressee (*AA1000, FEE, GRI)	Party to whom the assurance statement is formally addressed (either in title, separate addressee line, or within text)
Name of assuror (FEE, GRI)	Name of the firm that conducts the assurance engagement
Location of assuror (FEE, GRI)	Location of the office of the assurance provider
Report date (FEE, GRI)	Reference to the date at which the assurance exercise was finished
Responsibilities of reporter (FEE, GRI)	Explicit statement that reporter is responsible for preparation of report (keywords: responsible, responsibility)
Responsibilities of assuror (FEE, GRI)	Explicit statement that the reporter is responsible to express an (independent) opinion on the subject matter (the sustainability/ environmental/social report)
Independence of assuror from reporting organization (AA1000, FEE, GRI)	Statement expressing the independence of the two parties involved
Impartiality of assuror towards stakeholders (AA1000)	Assuror's declaration of impartiality with respect to stakeholder interests
***Category "assurance procedures"* (*proc*):**	
Scope of the assurance engagement (AA1000, FEE, GRI)	Assurance statement coverage (a 1 was assigned if anywhere in the assurance statement the coverage of the assurance exercise is stated)
Objective of the assurance engagement (AA1000, FEE, GRI)	Objective to be achieved through the engagement (indicating the level of assurance intended)
Competencies of assuror (AA1000, FEE)	Description of the professional skills that enable the engagement team to conduct the assurance exercise
Criteria used to assess evidence and reach conclusion (AA1000, FEE, GRI)	A statement that makes reference to particular criteria against which the sustainability report has been prepared (e.g. GRI and often internally developed standards)
Assurance standard used (AA1000, FEE, GRI)	Standards used which govern the work of the assurance provider (e.g. AA1000AS)
summary of work performed (AA1000, GRI)	Statement explaining the actions taken to arrive at a conclusion
***Category "recommendations and opinion"* (*opi*):**	
Materiality (from a stakeholder perspective) (AA1000)	Degree of information provision on materiality level (when the conclusion states that the report is in conformance with the AA1000AS principles (materiality, completeness and responsiveness) this qualifies for a reference, and thus a 1 was assigned)
Completeness (AA1000)	Statement expressing that all material aspects are

	covered by the report (when the conclusion states that the report is in conformance with the AA1000AS principles of materiality, completeness and responsiveness this qualifies for a reference and thus, a 1 will be assigned)
Responsiveness to stakeholder (AA1000)	Statement referring to the organization's procedures (or lack of them) for identifying stakeholder interests and concerns
General conclusion/opinion (AA1000, FEE,GRI)	Statement expressing the result of the assurance exercise (if there is no general conclusion, but the conclusion solely refers to the 3 principles of AA1000AS of materiality, completeness and responsiveness, a 0 was assigned)

Table 12: Indicators for content analysis of assurance statements, following the framework of O'Dwyer and Owen (2005) (Perego, 2009, p. 425-426)

Appendix E: Defining the sample by assurance provider

Number of assurance statements by assurance provider		
Assurance provider	**frequency**	**percentage[50]**
1. Auditor		
KPMG	33	37,93%
PWC	32	36,78%
Ernst&Young	16	18,39%
Deloitte	9	10,34%
BDO	1	1,15%
2. Consultants		
Bureau Veritas	4	4,60%
SGS ICS	4	4,60%
Aenor	2	2,30%
BECO group	1	1,15%
Sustainanalytics	1	1,15%
Det Norske Veritas (DNV)	1	1,15%
Business for social responsibility	1	1,15%
ERM	1	1,15%
Oxea	1	1,15%
Business and Society Belgium	1	1,15%
Fair Labour Organisation	1	1,15%
TUV Rheinland	1	1,15%
2future	1	1,15%
Jones Lang Salle	1	1,15%
ETA Umweltungmanagement	1	1,15%
3. Stakeholders		
External review committee	1	1,15%
4. Rating agencies		
Vigeo ratings	5	5,75%
BMJ ratings	1	1,15%
TOTAAL	120	

Table 13: Defining the sample by assurance provider: number of assurance statements by assurance provider

[50] The percentages are calculated against the total amount of assurance statements.

Appendix F: The selected companies in the sample

Corporation	market	ISIN number	CSR?[51]	Title of CSR report	year	Ass?[52]	Assurance Provider	Assurance Report
A2A	IT	IT0001233417	1	Sustainability report	2009	1	PWC	Independent report on the limited assurance engagement
ABERTIS INFRAESTRUCTURAS	ES	ES0111845014	1	CSR report	2009	1	PWC	Independent assurance report
ACCOR	FR	FR0000120404	1	Sustainable development	2009-2010	0	-	-
ACS	ES	ES0167050915	1	Corporate responsibility report	2009	1	KPMG	Independent assurance report
ADIDAS	DE	DE000A1EWWW0	1	Sustainability report	2010	1	Fair Labor Association	verifying compliance
AEGON	NL	NL0000303709	1	Sustainability Report	2009	1	Ernst&Young	Assurance report
AGEAS (EX-FORTIS)	BE	BE0003801181	1	Corporate social responsibility report	2007	1	KPMG (Sustainability)	Assurance report
AHOLD KON	NL	NL0006033250	1	CSR Report	2009	1	Deloitte	External Assurance Report
AIR FRANCE –KLM	FR	FR0000031122	1	CSR Report	2009-2010	1	KPMG	Statutory Auditors' report
AIR LIQUIDE	FR	FR0000120073	1	Sustainable development report	2009	1	Ernst&Young, Mazars	Statutory Auditors' limited assurance report
AIXTRON	DE	DE000A0WMPJ6	0	-	-	-	-	-
AKZO NOBEL	NL	NL0000009132	1	Sustainability facts and figures	2009	1	KPMG (Sustainability)	Independent Assurance report
ALCATEL-LUCENT	FR	FR0000130007	1	CSR Report	2009	1	Ernst&Young	Independent verification report
ALLIANZ	DE	DE0008404005	1	Sustainable development report	2010	0	-	-
ALSTOM	FR	FR0010220475	1	Activity and sustainable development report	2009/2010	0	-	-
ARCELORMITTAL	NL	NL0323134006	1	CSR Report	2009	1	Bureau Veritas	Independent assurance statement

[51] CSR? 1 stands for the presence of a CSR report, 0 stands for no CSR report.
[52] ASS? 1 stands for the presence of an assurance statement, 0 stands for no assurance statement.

ASML HOLDING	NL	NL0006034001	1	Sustainability Report	2009	1	BECO group	Assurance statement
ASSICURAZIONI GENERALI	IT	IT0000062072	1	Sustainability report	2009	0	-	-
ATLANTIA	IT	IT0003506190	0	-	-	-	-	-
ATOS ORIGIN	FR	FR0000051732	1	Corporate responsibility report	2009	1	KPMG	Auditor's report on a selection of sustainability indicators
AXA	FR	FR0000120628	1	Activity and CSR Report	2009	1	PWC	Review report
B.COM.PORTUGUES	PT	PTBCP0AM0007	1	Sustainability Report	2009	1	KPMG	Independent limited assurance report
B.ESPIRITO SANTO	PT	PTBES0AM0007	1	Sustainability Report	2009	1	KPMG	Independent limited assurance report
BANESTO	ES	ES0113440038	1	CSR report	2010	1	Aenor	Verificacion de la memoria de sostenibilidad
BANK OF IRELAND	IR	IE0030606259	0	-	-	-	-	-
BANKINTER	ES	ES0113679I37	1	Corporate responsibility report	2009	1	PWC	independent Review report
BASF	DE	DE000BASF111	0	-	-	-	-	-
BAYER	DE	DE000BAY0017	1	Sustainable development report	2009	1	Ernst&Young	Independent assurance statement
BCA MONTE DEI PASCHI DI SIENA	IT	IT0001334587	1	Social responsibility report website	2009	1	KPMG	Independent limited assurance report
BCO BILBAO VIZCAYA ARGENTARIA	ES	ES0113211835	1	Corporate responsibility report	2009	1	Deloitte	Independent assurance report
BCO POPULAR ESPANOL	ES	ES0113790531	1	Corporate social responsibility report	2009	1	PWC	Report on independent review
BCO SABADELL	ES	ES0113860A34	1	Corporate social responsibility report	2009	1	Bureau Veritas	?
BCO SANTANDER	ES	ES0113900J37	1	Sustainability report	2009	1	Deloitte	Independent assurance report
BEIERSDORF	DE	DE0005200000	1	Sustainability report	2009	1	Sustainanalytics	Sustainability rating
BELGACOM	BE	BE0003810273	1	CSR Report	2009	1	Ernst&Young	Assurance report of the independent auditor
BIC	FR	FR0000120966	1	Sustainable development report	2009	1	Ernst&Young	Attestation
BIOMERIEUX	FR	FR0010096479	0	-	-	-	-	-

BMW	DE	DE0005190003	1	Sustainable value report	2008	0	-	-
BNP PARIBAS ACT.A	FR	FR0000131104	1	Report on environmental and social responsibility	2009	1	PWC	review report
BOLSAS Y MERCADOS ESPANOLES	ES	ES0115056139	1	Corporate social responsibility report	2009	0	-	-
BOUYGUES	FR	FR0000120503	1	Business activities and sustainable development report	2009	0	-	-
BRISA	PT	PTBRI0AM0000	1	Sustainability Report	2009	1	KPMG	Independent limited assurance report
BUREAU VERITAS	FR	FR0006174348	0	-	-	-	-	-
CAP GEMINI	FR	FR0000125338	1	CSR and sustainability report	2009	1	Vigeo ratings	Extern rating
CARREFOUR	FR	FR0000120172	1	Activity and sustainability report	2009	1	KPMG	Statutory Auditors' Report
CASINO GUICHARD	FR	FR0000125585	1	Responsible Retailer Sustainable Development	2009	1	Ernst&Young	report by the statutory auditor
CELESIO	DE	DE000CLS1001	0	-	-	-	-	-
CGG VERITAS	FR	FR0000120164	0	-	-	-	-	-
CHRISTIAN DIOR	FR	FR0000130403	0	-	-	-	-	-
CNP ASSURANCES	FR	FR0000120222	1	Rapport d'activité et de developpement durable	2009	1	Vigeo ratings	une reconnaissance externe
COCA COLA HELLENIC BOTTELING CO	GR	XS0196608003	1	Social responsibility report	2009	0	-	-
COFINIMMO-SICAFI	BE	BE0003593044	1	Corporate social responsibility report	2010	0	-	-
COLRUYT (D)	BE	BE0974256852	0	-	-	-	-	-
COMMERZBANK	DE	DE0008032004	1	Corporate responsibility report	2009	0	-	-
CORIO	NL	NL0000288967	1	CSR report	2009	0	-	-
CREDIT AGRICOLE	FR	FR0000045072	1	Sustainable development compendium	2009	1	PWC, Ernst&Young	Statutory auditors' report
CRH	IR	IE0001827041	1	CSR report	2009	1	Det Norske Veritas (DNV)	Assurance statement
CRITERIA CAIXACORP	ES	ES0140609019	0	-	-	-	-	-
DANONE	FR	FR0000120644	1	Sustainability Report	2009	1	KPMG	opinion report

DASSAULT SYSTEMES	FR	FR0000130650	0	-	-	-	-	-
DELHAIZE GROUP	BE	BE0003562700	1	Corporate responsibility Report	2009	1	Business for Social Responsibility	independent review statement
DEUTSCHE BANK	DE	DE0005140008	1	CSR report	2009	0	-	-
DEUTSCHE BOERSE	DE	DE0005810055	1	Corporate responsibility report	2009	0	-	-
DEUTSCHE POST	DE	DE0005552004	1	Corporate responsibility report	2009/2010	1	PWC	Independent assurance report
DEUTSCHE POSTBANK	DE	DE0008001009	1	Sustainability report	2010	0	-	-
DEUTSCHE TELEKOM	DE	DE0005557508	1	Corporate responsibility report	2009	1	PWC	Independent assurance report
DEXIA	BE	BE0003796134	1	Sustainable Development Report	2009	1	Deloitte	Auditor's report
DSM KON	NL	NL0000009827	1	Triple P report	2009	1	KPMG (Sustainability)	Independent Assurance report
E.ON	DE	DE000ENAG999	1	CR report	2009	1	PWC	Independent assurance report
EADS	FR	NL0000235190	1	Corporate responsibility and sustainability report	2009	1	KPMG (Sustainability)	Independent Assurance report
EDENRED	FR	FR0010908533	0	-	-	-	-	-
EDP	PT	PTEDP0AM0009	1	Sustainability per Quarter Report	2009	0	-	-
EDP RENOVAVEIS	PT	ES0127797019	1	Sustainability report section	2009	-	-	-
EIFFAGE	FR	FR0000130452	1	rapport de développement durable	2009	1	PWC	contrôles
ELISA CORPORATION	FI	FI0009007884	0	-	-	-	-	-
ENAGAS	ES	ES0130960018	0	-	-	-	-	-
ENDESA	ES	ES0130670112	1	informe de sostenibilidad	2009	1	KPMG	informe de revisión independiente
ENEL	IT	IT0003128367	1	Sustainability report	2009	0	-	-
ENI	IT	IT0003132476	1	Sustainability report	2009	1	PWC	Independent report on the limited assurance engagement
ERSTE GROUP BANK	AT	AT0000652011	0	-	-	-	-	-
ESSILOR INTL.	FR	FR0000121667	1	Seeing the world better	2006	1	BMJ ratings	Assessment: global performance index
EULER HERMES	FR	FR0004254035	0	-	-	-	-	-

EUTELSAT COMMUNIC.	FR	FR0010221234	0	-	-	-	-	-
FERROVIAL	ES	ES0118900010	1	Corporate responsibility section	2009	1	PWC	Independent assurance report
FIAT	IT	IT0001976403	1	Sustainability report	2009	1	SGS ICS	Statement of assurance
FIAT INDUSTRIAL	IT	IT0004644743	0	-	-	-	-	-
FINMECCANICA	IT	IT0003856405	1	Sustainability report	2009			
FOMENTO DE CONSTRUCY CONTRA	ES	ES0122060314	1	Corporate social responsibility report	2009	1	KPMG	report by the independent external assurance provider
FONC.DES REGIONS	FR	FR0000064578	1	Sustainable development chapter	2009	0	-	-
FRANCE TELECOM	FR	FR0000133308	1	CSR report	2009	1	Deloitte	External Assessment
FRAPORT AG FRANKFURT	DE	DE0005773303	1	Sustainability report	2009	0	-	-
FRESENIUS MEDICAL CARE	DE	DE0005785802	0	-	-	-	-	-
GAMESA	ES	ES0143416115	1	Sustainability report	2009	1	Aenor	Sustainable verification report
GAS NATURAL SDG	ES	ES0116870314	1	Corporate responsibility report	2009	1	PWC	Independent review report
GDF SUEZ	FR	FR0010208488	1	Business and sustainable development report	2009	1	Deloitte, Ernst&Young, Mazars	Statutory Auditors' report
GECINA	FR	FR0010040865	1	Sustainable development report	2009	1	Oxea	Attestation d'audit externe
GEMALTO	FR	NL0000400653	1	Sustainability report	2009	0	-	-
GESTEVISION TELECINCO	ES	ES0152503035	1	Corporate responsibility report	2008	1	PWC	Independent assurance report
GROUPE EUROTUNNEL	FR	FR0010533075	0	-	-	-	-	-
GRUPO ACCIONA	ES	ES0125220311	1	Sustainability report	2009	1	KPMG	Independent assurance report
HANNOVER RUECK	DE	DE0008402215	0	-	-	-	-	-
HEINEKEN	NL	NL0000009165	1	Sustainability report	2009	1	KPMG (Sustainability)	Assurance report
HENKEL PREF	DE	DE0006048432	1	Sustainability report	2010	0		-
HERMES INTERNATIONAL	NL	FR0000052292	0	-	-	-	-	-
HOCHTIEF	DE	DE0006070006	1	Sustainability report	2009	1	PWC	Independent assurance report
IBERDROLA	ES	ES0144580Y14	1	Sustainability report	2009	1	KPMG	External independent verification report

IBERDROLA RENOVABLES	ES	ES0147645016	1	Sustainability report	2009	1	KPMG	Independent assurance report
ICADE	FR	FR0000035081	0	-	-	-	-	-
IMERYS	FR	FR0000120859	1	Sustainable development report	2009	0	-	-
IMTECH	NL	NL0006055329	0	-	-	-	-	-
INDITEX	ES	ES0148396015	1	Corporate responsibility report	2009	1	SGS ICS	Independent verification report
INDRA SISTEMAS	ES	ES0118594417	1	Sustainability report	2009	1	KPMG	Independent assurance report
INFINEON TECHNOLOGIES	DE	DE0006231004	0	-	-	-	-	-
ING GROEP	NL	NL0000303600	1	Corporate responsibility Report	2009	1	Ernst&Young	Assurance report
INTESA SANPAOLO	IT	IT0000072618	1	Social and environmental report	2009	1	Ernst&Young	Compliance statement
J.MARTINS,SGPS	PT	PTJMT0AE0001	0	-	-	-	-	-
JC DECAUX SA.	FR	FR0000077919	1	Sustainable development report	2009	0	-	-
K + S	DE	DE0007162000	1	Corporate and sustainability report	2010	0	-	-
KBC	BE	BE0003565737	1	CSR report	2009	1	Vigeo and Eiris	Sustainability ratings and indices
KESKO	FI	FI0009000202	1	Corporate responsibility report	2009	1	PWC	Independent assurance report
KLEPIERRE	FR	FR0000121964	1	Sustainable development report	2009	1	Vigeo	a transparent approach to ratings
KONE B	FI	FI0009013403	1	Corporate responsibility report	2009	0	-	-
KPN KON	NL	NL0000009082	1	Sustainability report	2009	1	KPMG (Sustainability)	Independent Assurance report
LAFARGE	FR	FR0000120537	1	Sustainability report	2009	1	Ernst&Young	Assurance
LAGARDERE S.C.A.	FR	FR0000130213	1	Sustainable development report	2009	0	-	-
LANXESS	DE	DE0005470405	1	Corporate responsibility report	2009	0	-	-
LEGRAND	FR	FR0010307819	1	Sustainable development chapter	2009	0	-	-
LINDE	DE	DE0006483001	1	Corporate responsibility report website	2009	1	KPMG	Independent assurance report

L'OREAL	FR	FR0000120321	1	Sustainable Development Report	2009	1	PWC	Review report
LOTTOMATICA	IT	IT0003990402	1	Sustainability report	2009	1	Ernst&Young	Independent assurance statement
LUFTHANSA REG	DE	DE0008232125	1	Sustainability report	2009	0	-	-
LVMH	FR	FR0000121014	1	Environmental and social data	2009	1	Ernst&Young	Report on certain environmental indicators
MAPFRE	ES	ES0124244E34	1	Social responsibility report	2009	1	Ernst&Young	Independent review report
MERCK	DE	DE0006599905	1	Corporate responsibility review	2009-2010	0	-	-
METRO	DE	DE0007257503	1	Sustainability report	2009	0	-	-
METROPOLE TV	FR	FR0000053225	0	-	-	-	-	-
METSO	FI	FI0009007835	1	Sustainability results website	2010	1	PWC	Independent assurance report
MICHELIN	FR	FR0000121261	1	Sustainable development report	2009	1	PWC	Review report
MOBISTAR	BE	BE0003735496	1	CSR report	2009	1	Business and society Belgium	Evaluation
MTU AERO ENGINES HLDG	DE	DE000A0D9PT0	0	-	-	-	-	-
MUENCHENER RUECK	DE	DE0008430026	1	Corporate responsibility report	2009-2010	0	-	-
NATIXIS	FR	FR0000120685	1	Sustainable Development Report	2009	0	-	-
NATL BANK OF GREECE	GR	GRS003013000	1	CSR report	2009	0	-	-
NEOPOST	FR	FR0000120560	0	-	-	-	-	-
NESTLE	BE	BE0004605466	1	Creating shared value report	2009	1	Bureau Veritas	Independent assurance statement
NEXANS	FR	FR0000044448	1	institutional sustainable development booklet	2009	0	-	-
NOKIA	FI	FI0009000681	1	Sustainability report	2009	1	PWC	Independent assurance report
OTE	GR	XS0173549659	1	Corporate responsibility report	2009	1	Deloitte	Independent assurance report
OUTOKUMPU	FI	FI0009002422	1	Corporate responsibility section	2009	1	PWC	Independent assurance report
OUTOTEC	FI	FI0009014575	0	-	-	-	-	-

P.TELECOM	PT	PTPTC0AM0009	1	Sustainability Report	2009	1	SGS ICS	Verification statement
PAGESJAUNES	FR	FR0010096354	0	-	-	-	-	-
PERNOD RICARD	FR	FR0000120693	1	a sincere and sustainable commitment report	2009	0	-	-
PEUGEOT	FR	FR0000121501	1	Sustainable development performance indicators	2009	1	PWC	Review report
PHILIPS KON	NL	NL0000009538	1	Sustainability Report	2009	1	KPMG	Independent assurance report
PIRAEUS BANK	GR	GRS014013007	0	-	-	-	-	-
PIRELLI & C.	IT	IT0004623051	1	Sustainability report	2009	1	SGS ICS	Assurance statement
POHJOLA BANK	FI	FI0009003222	1	Corporate responsibility report	2008	0	-	-
PORSCHE AUTOMOBIL HOLDING SE	DE	DE000PAH0038	0	-	-	-	-	-
PPR	FR	FR0000121485	1	CSR report	2009	0	-	-
PRYSMIAN	IT	IT0004176001	0	-	-	-	-	-
PUBLICIS GROUPE SA	FR	FR0000130577	1	CSR report	2009	0	-	-
PUMA	DE	DE0006969603	1	Sustainability report	2007-2008	1	TUV Rheinland	Verification statement
QIAGEN	NL	NL0000240000	1	Sustainability approach	2009	0	-	-
RANDSTAD	NL	NL0000379121	1	Maatschappelijk verslag	2009	0	-	-
RAUTARUUKKI K	FI	FI0009003552	1	Corporate responsibility achievements	2010	0	-	-
RED ELECTRICA CORP SA	ES	ES0173093115	1	CR report	2010	1	Deloitte	annex
REED ELSEVIER	NL	NL0006144495	1	Corporate responsibility Report	2009	1	Ernst&Young	Assurance statement
REPSOL YPF	ES	ES0173516115	1	Corporate responsibility report	2009	1	Deloitte	Independent assurance report
REXEL	FR	FR0010451203	1	Sustainable development report	2008-2009	0	-	-
RHODIA	FR	FR0010479956	1	Sustainable development report	2008-2009	1	PWC	Review report of statutory auditors
RHOEN KLINIKUM	DE	DE0007042301	0	-	-	-	-	-
ROYAL DUTCH SHELLA	NL	GB00B03MLX29	1	Sustainability report	2009	1	External review committee	Report assessment

RTL GROUP	LU	LU0061462528	0	-	-	-	-	-
RWE	DE	DE0007037129	1	Corporate responsibility report	2009	1	PWC	Independent assurance report
SAFRAN	FR	FR0000073272	0	-	-	-	-	-
SAINT GOBAIN	FR	FR0000125007	1	Sustainable development	2009	0	-	-
SAIPEM	IT	IT0000068525	1	Sustainability report	2010	1	Ernst&Young	Independent assurance statement
SAMPO	FI	FI0009003305	1	Corporate responsibility section	2009	0	-	-
SANOFI-AVENTIS	FR	FR0000120578	1	Responsabilité Sociale de l'entreprise	2009	1	PWC, Ernst&Young	Rapport d'examen des commissaires aux comptes
SANOMA	FI	FI0009007694	1	Corporate responsibility report	2010	0	-	-
SAP	DE	DE0007164600	1	Sustainability report	2010	1	KPMG	Independent assurance statement
SBM OFFSHORE	NL	NL0000360618	1	Sustainability report	2009	1	PWC	Assurance Report
SCHNEIDER ELECTRIC	FR	FR0000121972	1	Business and sustainable development report	2009	0	-	-
SES	LU	LU0088087324	0	-	-	-	-	-
SIEMENS	DE	DE0007236101	1	Sustainability report	2009	1	PWC	Independent assurance report
SNAM RETE GAS	IT	IT0003153415	1	Sustainability report	2010	1	PWC	Independent report on the limited assurance engagement
SOCIETE GENERALE	FR	FR0000130809	1	Sustainable development website	-	1	Ernst&Young	Statutory auditors' report
SODEXO	FR	FR0000121220	1	Corporate citizenship Progress Review	2009	0	-	-
SOLARWORLD	DE	DE0005108401	1	Report on corporate sustainable management	2009	1	BDO	Confirmation of the auditor
SOLVAY	BE	BE0003470755	1	Towards sustainable development	2008-2012	0	-	-
STMICROELECTRONICS	NL	NL0000226223	1	Corporate responsibility reports	2009	1	Bureau Veritas	Independent verification report

STORA ENSO OYJ	FI	FI0009005961	1	Sustainability report	2010	1	2future	Independent assurance report
SUEZ ENVIRONNEMENT	FR	FR0010613471	1	Sustainable development commitments and performance report	2009	1	Ernst&Young	Statutory Auditors' report
SYMRISE	DE	DE000SYM9999	1	CSR report	2009	0	-	-
TECHNIP	FR	FR0000131708	1	Activities and sustainable development report	2009	0	-	-
TELECOM ITALIA	IT	IT0003497168	1	Sustainability report	2009	1	KPMG	Independent limited assurance report
TELEFONICA	ES	ES0178430E18	1	Corporate responsibility report	2009	1	Ernst&Young	Independent review
TELEKOM AUSTRIA	AT	AT0000720008	1	Sustainability report	2009-2010	0	-	-
TELENET GROUP	BE	BE0003826436	1	Together Green	2009	0	-	-
TENARIS	LU	LU0156801721	1	HSE report	2009-2010	0	-	-
TERNA	IT	IT0003242622	1	Sustainability report	2009	1	KPMG	Independent limited assurance report
TF1	FR	FR0000054900	1	Sustainable development report	2009	0	-	-
THYSSENKRUPP	DE	DE0007500001	1	Sustainability report	2009	0	-	-
TNT	NL	NL0000009066	1	Corporate responsibility Website	2009	1	PWC	Assurance report
TOGNUM	DE	DE000A0N4P43	1	Corporate social responsibility report	2009	0	-	-
TOTAL	FR	FR0000120271	1	Environment and society report	2009	1	KPMG, Ernst&Young	Assurance report
TUI	DE	DE000TUAG000	1	Sustainable development report	2009	0	-	-
UBI BCA	IT	IT0003487029	1	Corporate responsibility and sustainability report	2009	1	Vigeo ratings	rating
UMICORE (D)	BE	BE0003884047	1	Report to shareholders and society	2009	0	-	-
UNIBAIL-RODAMCO	FR	FR0000124711	1	Corporate sustainability report	2009	1	Jones Lang Salle	Advisor's statement
UNICREDIT	IT	IT0000064854	1	Sustainability report	2009	1	KPMG	Independent limited assurance report

UNILEVER	NL	NL0000009355	1	Sustainable development website	2009	1	Deloitte	Independent assurance report
VALEO	FR	FR0000130338	0	-	-	-	-	-
VEOLIA ENVIRON.	FR	FR0000124141	1	Annual and sustainability report	2009	0	-	-
VERBUND	AT	AT0000746409	1	Sustainability report	2009	1	ETA umweltungmanagement	auditor's certificate
VIENNA INSURANCE	AT	AT0000908504	0	-	-	-	-	-
VINCI	FR	FR0000125486	1	Sustainable development report	2009	0	-	-
VIVENDI	FR	FR0000127771	1	Activity and sustainable development report	2009	1	KPMG	External auditor's report
VOLKSWAGEN AG NON-VTG	DE	DE0007664005	1	Sustainability report	2009-2010	1	PWC	Independent assurance report
WARTSILA	FI	FI0009003727	1	Sustainability report section	2009	1	KPMG	Independent assurance report
WENDEL	FR	FR0000121204	0	-	-	-	-	-
WERELDHAVE	NL	NL0000289213	0	-	-	-	-	-
WINCOR NIXDORF	DE	DE000A0CAYB2	1	Sustainability section	2009	0	-	-
WOLTERS KLUWER	NL	NL0000395903	1	Sustainable entrepreneurship report website	2009	0	-	-
ZARDOYA OTIS	ES	ES0184933812	1	The way to green	2009	0	-	-

Table 14: The selected companies in the sample

Appendix G: An example of an assurance statement by a Big4 audit firm

KPMG

ADDRESSEE

Danone
Head Office: 17, boulevard Haussmann
75009 Paris

Auditor's Report on the "Danone Way Fundamentals" Initiative and a Selection of Environmental and Social Performance Indicators of Danone for 2009

CLIENT & TASK

As requested by Danone, we have performed a review to enable us to provide a limited level of assurance on:

- The policies and resources as well as the performance indicators of the "Danone Way Fundamentals" initiative ("the Results") presented *on pages 52 to 61* of the Sustainability Report for 2009;
- The environmental[1] and social[2] performance indicators for 2009 ("the Data") selected by Danone and indicated by the symbol ☑ presented *on pages 178 to 230* of the Sustainability Report for 2009.

RESPONSIBILITY

This information was prepared under the responsibility of the Group's Social Affairs and Social Responsibility Department, in accordance with the internal methodological protocol "Danone Way Fundamentals" ("the Protocol"), which is available on request from that department.
The methodological note "Report Parameters" presented *on pages 143 to 147* provides further details on the consolidation scope, and on the definitions and methods used to collect data and calculate the performance indicators.

RESPONSIBILITY

It is our responsibility, based on the work performed, to express a conclusion on the Data and on the Results of the "Danone Way Fundamentals" initiative.
The conclusions below only relate to this information, and not to the whole Sustainability Report 2009.

This is a free translation into English of the original report issued in the French language and is provided solely for the convenience of English-speaking readers.

[1] Total production, Total number of ISO 14001 certified sites, Thermal energy consumption, Electricity consumption, Water consumption, Total CO_2 emissions, Final ejection of COD and Total quantity of waste generated (except for sludge from sewage plants).
[2] Total number of employees at 31st December, Average number of hours' training per employee, Total employees trained, Frequency of work accidents and Number of accidental deaths.

Nature and scope of our work

SCOPE

We performed a review to provide moderate assurance that the Results of the "Danone Way Fundamentals" initiative and the selected Data do not contain any material misstatements. A higher level of assurance would have required a more extensive review.

APPROACH

For the selected information, we:

- Assessed the "Danone Way Fundamentals" protocol with regard to its relevance, reliability, neutrality, understandability and completeness;
- Conducted interviews with the persons responsible for implementing the Protocol in the Group Human Resources, Social Affairs and Social Responsibility, and Environment Departments;
- Conducted interviews and carried out surveys on the implementation of the Protocol in ten Business Units[3] for social data and the "Danone Way Fundamentals" initiative and in nineteen sites[4] within these Business Units for environmental data; the choice of the sample was based on their contribution to the Group consolidated data, their activity, their location and on the results of our work carried out last year;
- Conducted consistency tests on Data consolidation and on the Results of the "Danone Way Fundamentals" initiative;
- Reviewed the work performed by the internal audit relative to the "Danone Way Fundamentals" initiative.

The contribution of the selected entities represents:

- between 18% and 41%[5] of environmental Data, or an average of 21%, except for one indicator,
- between 20% and 44% of social Data, or on average 28%,
- and 23% of the "Danone Way Fundamentals" initiative Results.

[3] Danone Russia, Bonafont, HOD Mexico, Danone France, Milupa Fulda Baby, Milupa Germany Baby, Dannon Company, Danone Mexico, Fontvella and Danone Netherlands.

[4] Tchekhov, Volga*, Toluca, Monterrey*, Volcanes, St Just, Bailleul*, Ferrières*, Le Molay*, Villecomtal*, La Capelle*, Fulda, West Jordan*, Minster, Irapuato, Amer*, Lanjaron, San Hilario*, Siguenza*.

* For these sites, we did not perform any on-site work. Our audit was performed at Business Unit level.

[5] The coverage rate of 41% is relative to the indicator « Total number of ISO 14001 certified sites » for which additional work has been performed during consolidation phase.

Auditor's Report on the "Danone Way Fundamentals" Initiative
and a Selection of Environmental and Social Performance Indicators
of Danone for 2009

Comments on procedures

We would like to draw your attention to the following developments:

- The "Danone Way Fundamentals" initiative has been deployed in some entities of Baby and Medical divisions;
- The reconciliation of social and safety perimeters with financial perimeter has been formalised;
- Our work at entity level enabled to establish that the Protocol has been generally understood and well implemented by the Business Units reviewed.

RECOMMENDATIONS

In addition, we identified the following areas for improvements, which should be taken into account as part of an ongoing progress policy:

- The calculation methods and definitions should be clarified further, in particular the indicator relating to "Number of training hours", to ensure more homogeneous Group reporting practices;
- The internal control system should be improved at each level of collection and consolidation, in particular for the environmental indicators "Water consumption", Final ejection of COD" and "CO_2 emissions due to refrigerants".

Conclusion CONCLUSIONS

Based on our review, we did not find any material misstatements that could call into question the fact that the environmental and social Data examined presented *on pages 178 to 230*, identified by the symbol ☑, and the "Danone Way Fundamentals" initiative Results presented *on pages 52 to 61* of the Sustainability Report for 2009 were prepared, in all material respects, in accordance with the above-mentioned Protocol.

Paris La Défense, April 15, 2010
KPMG Audit - Department of KPMG S.A.

Philippe Arnaud
Partner
In Charge of the Environment and Sustainable Development Department

Figure 11: Example of an assurance statement by a Big4 audit firm

Appendix H: Descriptive statistics

1. The choice of assurance (Model 1)

A. The variable 'industry'

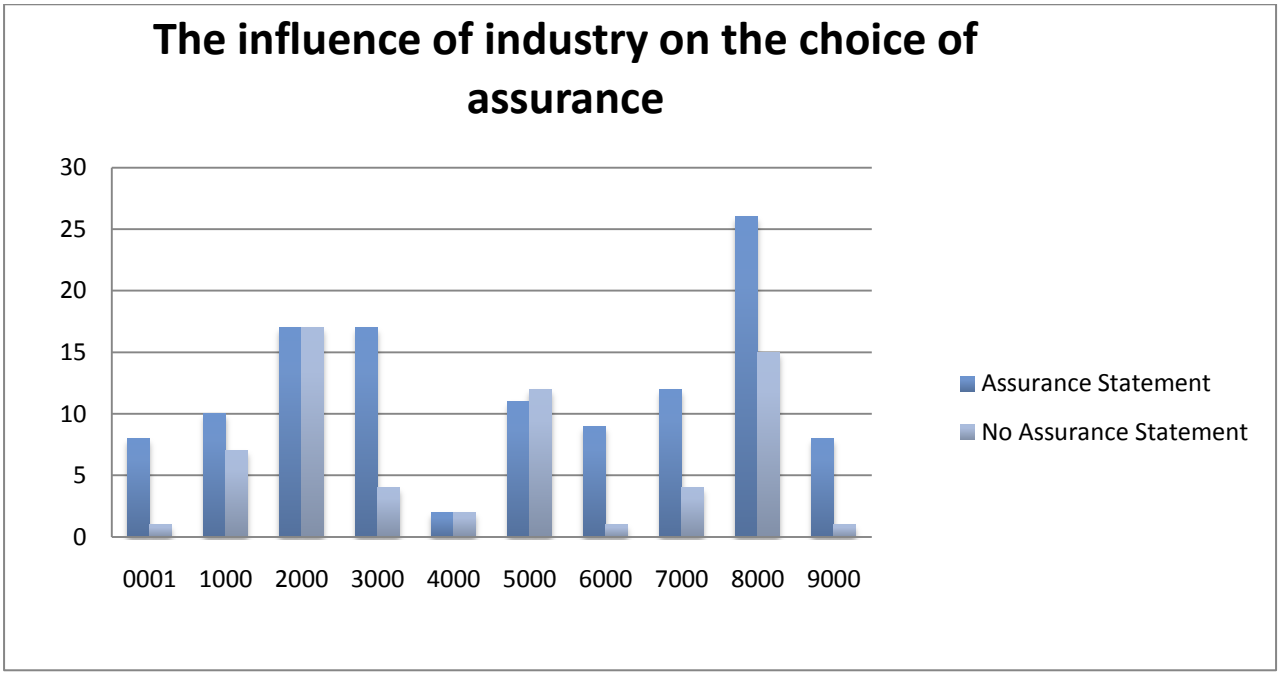


Figure 12: The influence of industry on the choice of assurance (Model 1): absolute numbers

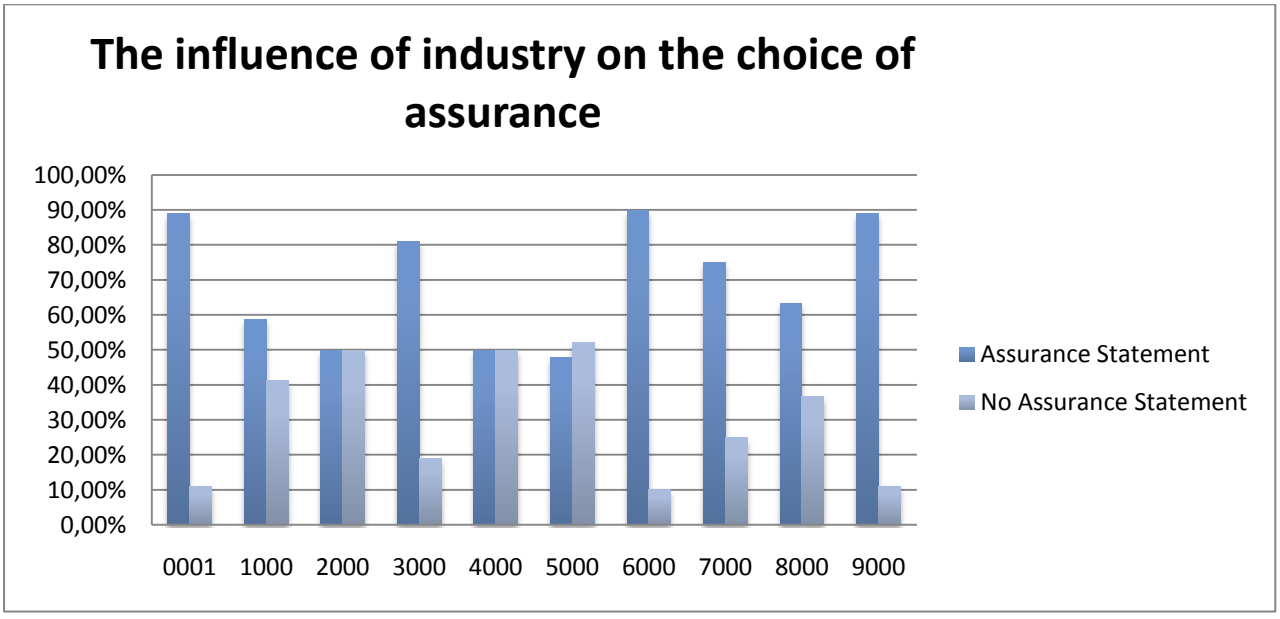


Figure 13: The influence of industry on the choice of assurance (Model 1): percentages

The influence of industry on the choice of assurance: absolute numbers and percentages					
Assurance statements?		1	0	1	0
Industry	0001	8	1	88,89%	11,11%
	1000	10	7	58,82%	41,18%
	2000	17	17	50,00%	50,00%
	3000	17	4	80,95%	19,05%
	4000	2	2	50,00%	50,00%
	5000	11	12	47,83%	52,17%
	6000	9	1	90,00%	10,00%
	7000	12	4	75,00%	25,00%
	8000	26	15	63,41%	36,59%
	9000	8	1	88,89%	11,11%

Table 15: The influence of industry on the choice of assurance (Model 1)

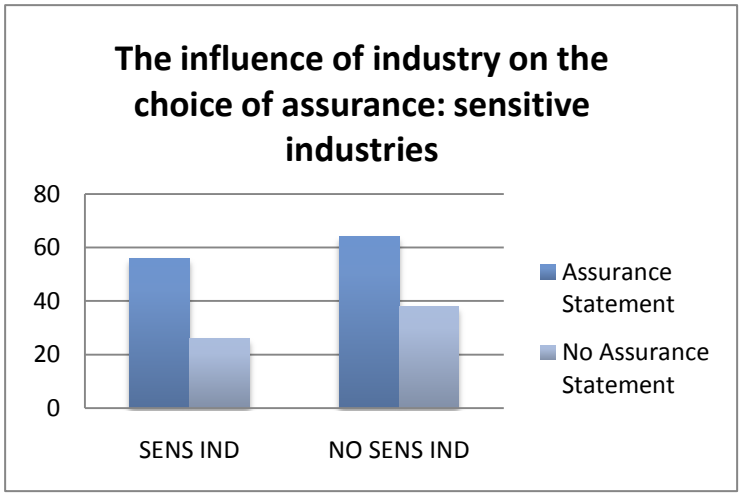


Figure 14: The influence of industry on the choice of assurance (Model 1): sensitive industries - absolute numbers

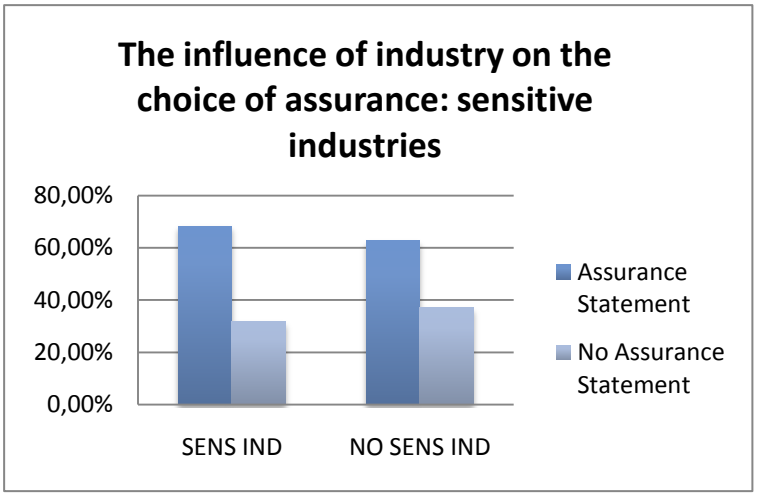


Figure 15: The influence of industry on the choice of assurance (Model 1): sensitive industries – percentages

The influence of industry on the choice of assurance: sensitive industries - absolute numbers and percentages					
Sensitive industry	Assurance statements?	1	0	1	0
	SENS IND	56	26	68,29%	31,71%
	NO SENS IND	64	38	62,75%	37,25%

Table 16: The influence of industry on the choice of assurance (Model 1): sensitive industries

B. The variable 'nationality'

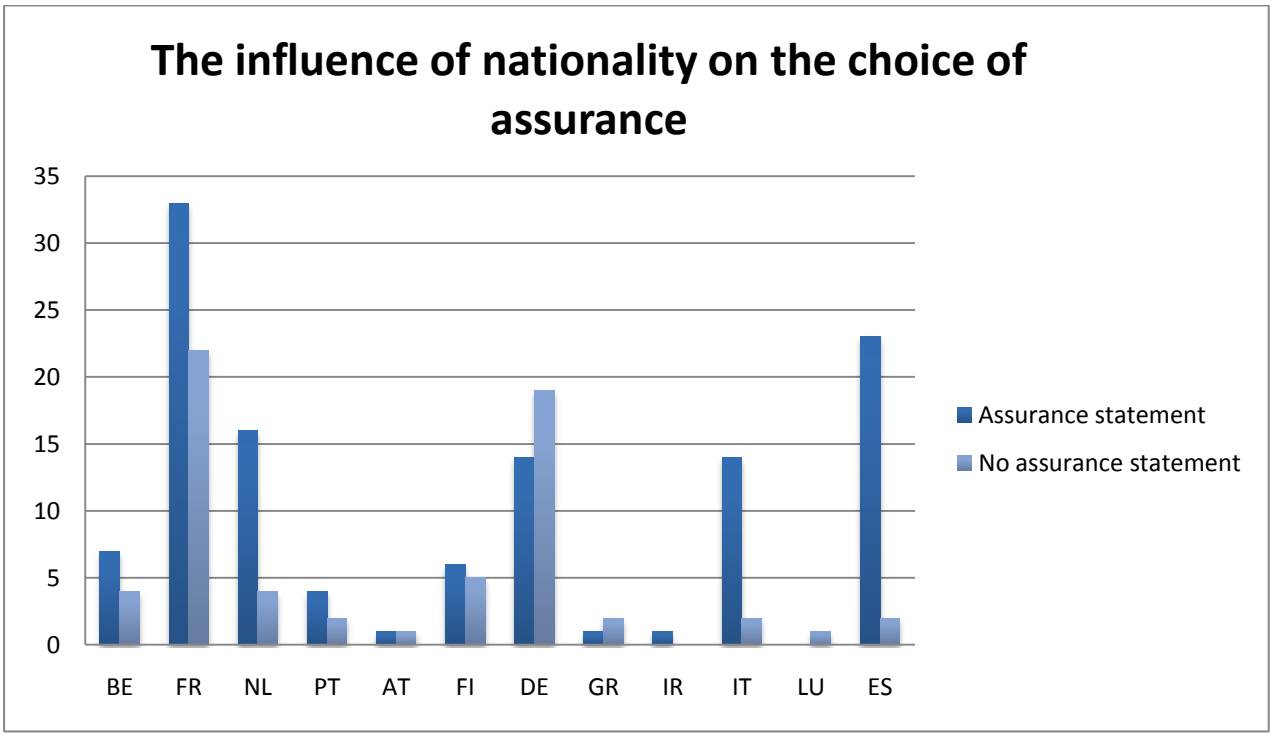


Figure 16: The influence of nationality on the choice of assurance (Model 1): absolute numbers

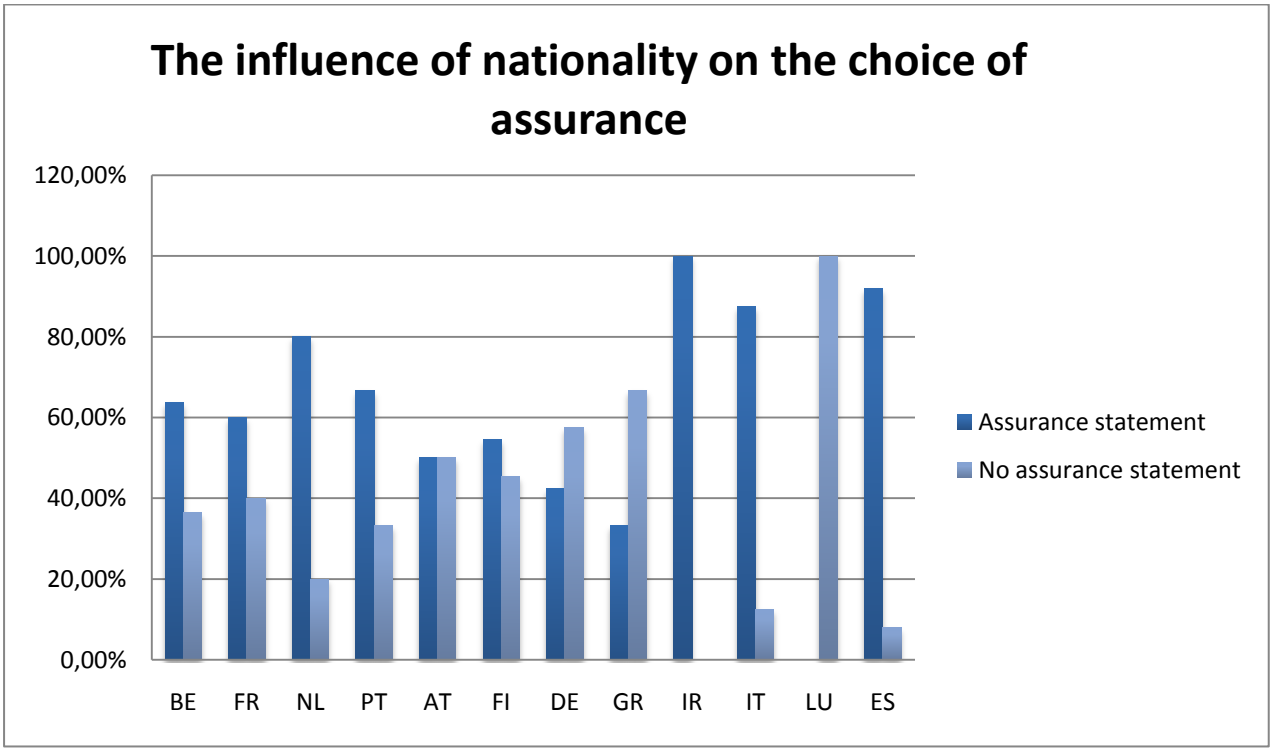


Figure 17: The influence of nationality on the choice of assurance (Model 1): percentages

The influence of nationality on the choice of assurance: absolute numbers and percentages							
	Assurance Statement?	LAPORTA	NCRI	1	0	1	0
Nationality	BE	5	66,7	7	4	63,64%	36,36%
	FR	7,49	65,3	33	22	60,00%	40,00%
	NL	7	68,3	16	4	80,00%	20,00%
	PT	7,34	59,1	4	2	66,67%	33,33%
	AT	7	66,7	1	1	50,00%	50,00%
	FI	8	72,2	6	5	54,55%	45,45%
	DE	5,62	68,0	14	19	42,42%	57,58%
	GR	5,09	57,4	1	2	33,33%	66,67%
	IR	7,9	66,6	1	0	100,00%	0,00%
	IT	5,2	56,9	14	2	87,50%	12,50%
	LU	-	-	0	1	0,00%	100,00%
	ES	7,9	61,9	23	2	92,00%	8,00%

Table 17: The influence of nationality on the choice of assurance (Model 1)

C. Other variables

The influence of the other factors on the choice of assurance		
Assurance statements?	1	0
Ownership	31,83%	26,54%
Media visibility	73,05	45,34
Size (natural log of total assets)	25,65	25,76
Profitability	3,54%	23,79%
Leverage	7,22	5,84
Size (number of employees)	79384	56985

Table 18: The influence of other factor on the choice of assurance (Model 1)

2. The choice of assurance provider: (Model 2)

A. The variable 'industry'

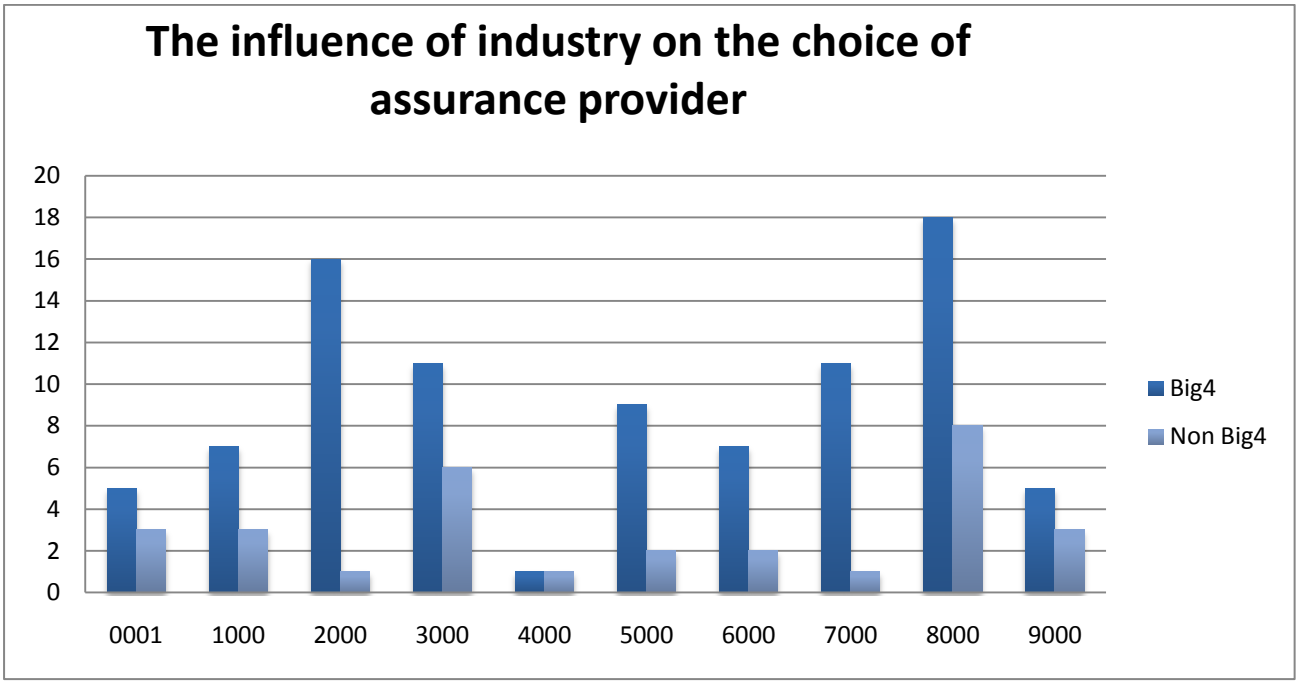


Figure 18: The influence of industry on the choice of assurance provider (Model 2): absolute numbers

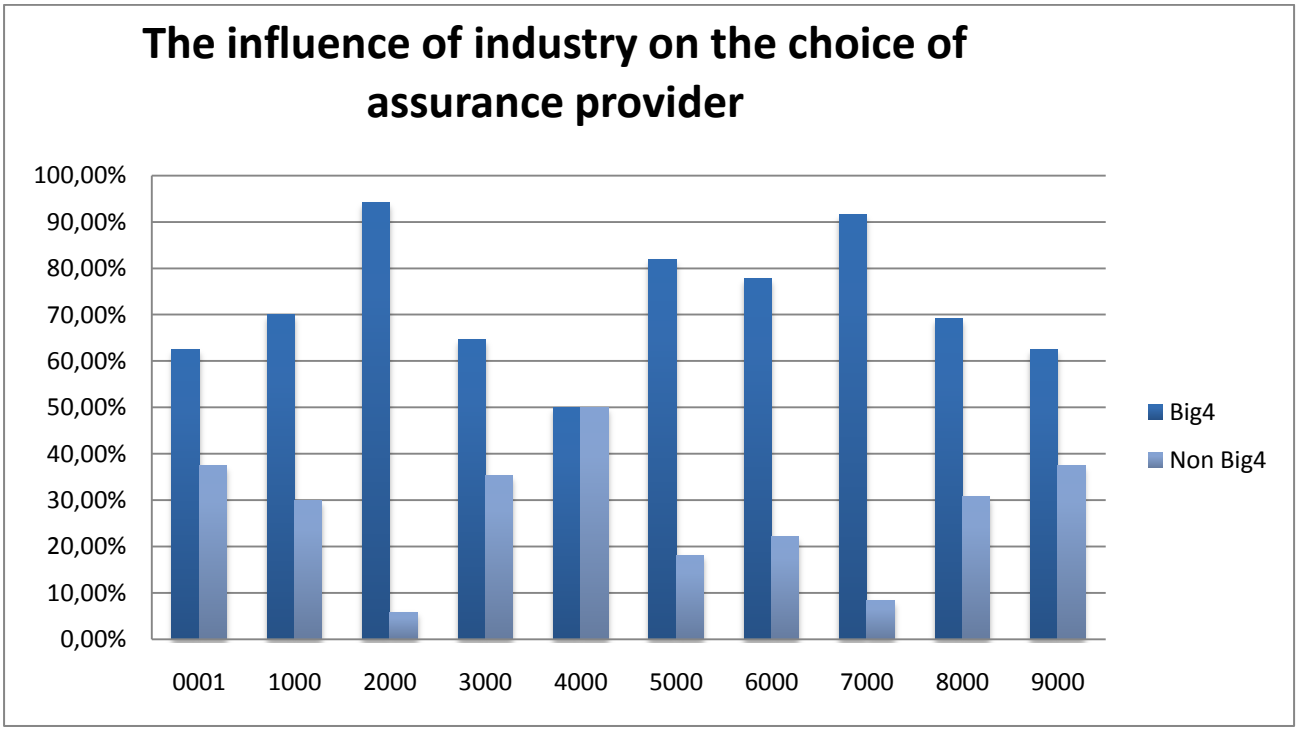


Figure 19: The influence of industry on the choice of assurance provider (Model 2): percentages

The influence of industry on the choice of assurance provider (BIG4/NONBIG4): absolute numbers and percentages					
Assurance Provider?		BIG4	NONBIG4	BIG4	NONBIG4
Industry	0001	5	3	62,50%	37,50%
	1000	7	3	70,00%	30,00%
	2000	16	1	94,12%	5,88%
	3000	11	6	64,71%	35,29%
	4000	1	1	50,00%	50,00%
	5000	9	2	81,82%	18,18%
	6000	7	2	77,78%	22,22%
	7000	11	1	91,67%	8,33%
	8000	18	8	69,23%	30,77%
	9000	5	3	62,50%	37,50%

Table 19: The influence of industry on the choice of assurance provider (Model 2)

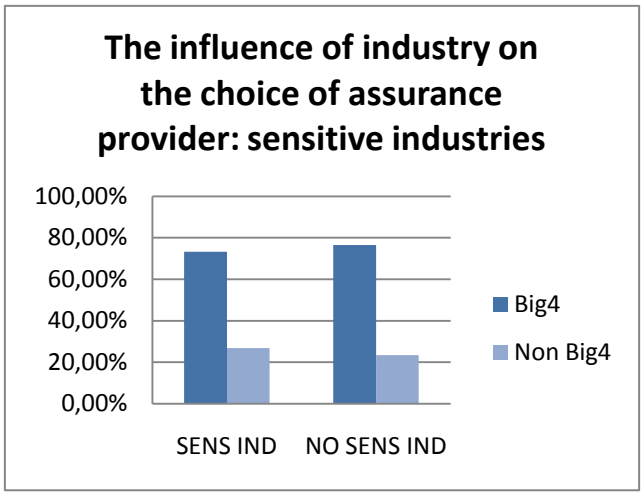


Figure 20: The influence of industry on the choice of assurance provider (Model 2): sensitive industries - percentages

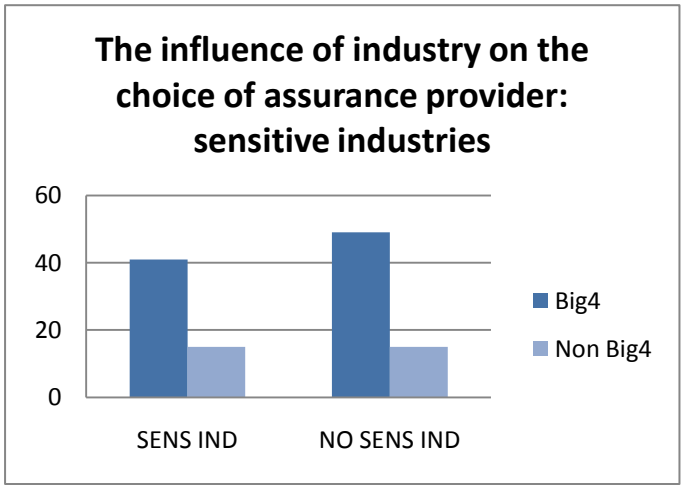


Figure 21: The influence of industry on the choice of assurance provider (Model 2): sensitive industries - absolute numbers

The influence of industry on the choice of assurance provider (BIG4/NONBIG4): sensitive industries					
Sensitive industry	Assurance Provider?	BIG4	NONBIG4	BIG4	NONBIG4
	SENS IND	41	15	73,21%	26,79%
	NO SENS IND	49	15	76,56%	23,44%

Table 20: The influence of industry on the choice of assurance provider (Model 2): sensitive industries

B. The variable 'nationality'

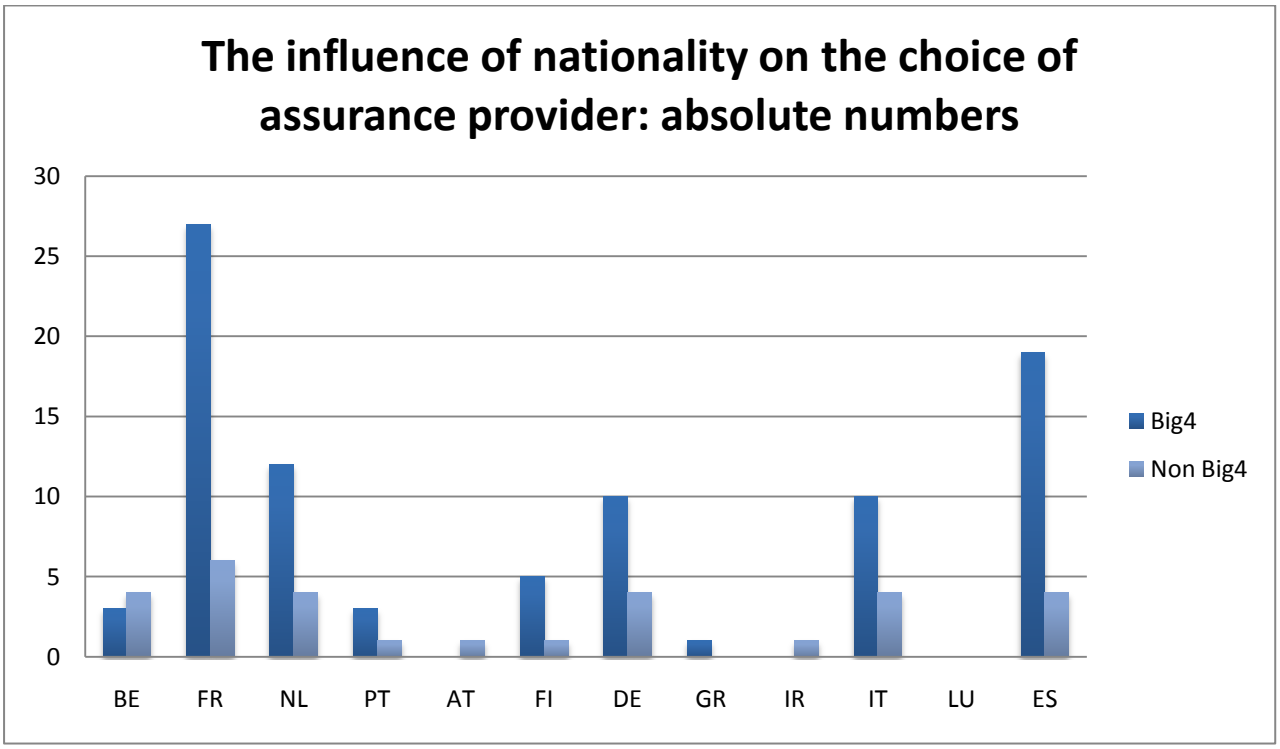


Figure 22: The influence of nationality on the choice of assurance provider (Model 2): absolute numbers

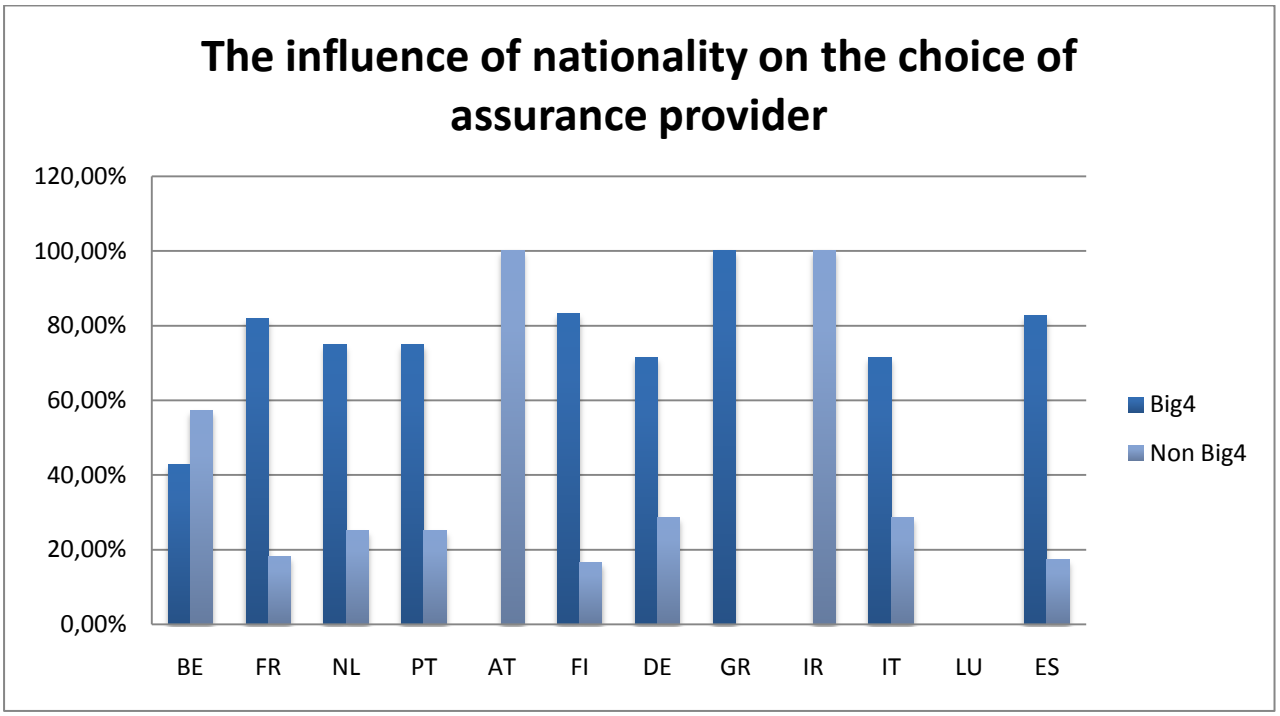


Figure 23: The influence of nationality on the choice of assurance (Model 2): percentages

The influence of nationality on the choice of assurance provider (BIG4/NONBIG4): absolute numbers and percentages							
	Assurance Provider?	LAPORTA	NCRI	BIG4	NONBIG4	BIG4	NONBIG4
Nationality	BE	5	66,7	3	4	42,86%	57,14%
	FR	7,49	65,3	27	6	81,82%	18,18%
	NL	7	68,3	12	4	75,00%	25,00%
	PT	7,34	59,1	3	1	75,00%	25,00%
	AT	7	66,7	0	1	0,00%	100,00%
	FI	8	72,2	5	1	83,33%	16,67%
	DE	5,62	68,0	10	4	71,43%	28,57%
	GR	5,09	57,4	1	0	100,00%	0,00%
	IR	7,9	66,6	0	1	0,00%	100,00%
	IT	5,2	56,9	10	4	71,43%	28,57%
	LU	-	-	0	0	-	-
	ES	7,9	61,9	19	4	82,61%	17,39%

Table 21: The influence of nationality on the choice of assurance provider (Model 2)

C. Other variables

The influence of the other factors on the choice of assurance provider (BIG4/NONBIG4)		
Assurance Provider?	BIG4	NONBIG4
Ownership	33,59%	26,18%
Media visibility	89,16	24,73
Size (natural log of total assets)	25,84	24,69
Profitability	3,47%	3,74%
Leverage	8,19	4,32
Size (number of employees)	87602	54730

Table 22: The influence of other factors on the choice of assurance provider (Model 2)

3. The choice of assurance provider: (Model 3)

A. The variable 'industry'

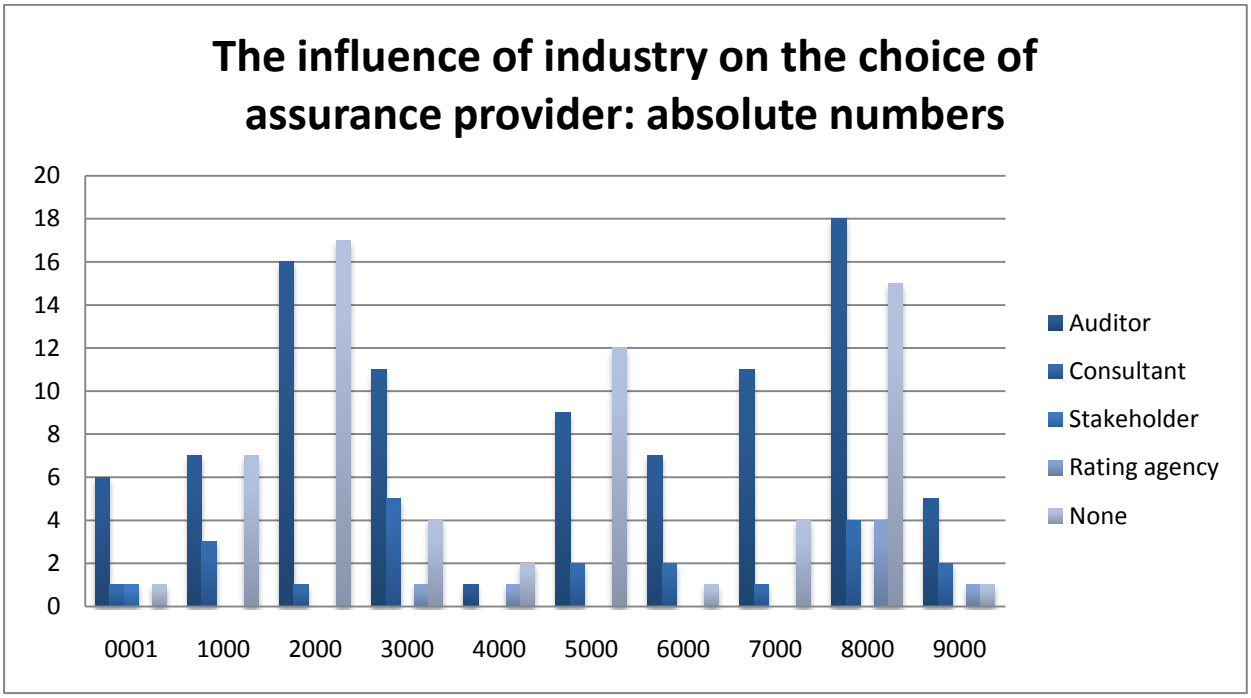


Figure 24: The influence of industry on the choice of assurance provider (Model 3): absolute numbers

The influence of industry on the choice of assurance provider (5): absolute numbers						
	Assurance Provider?	Auditor	Consultant	Stakeholder	Rating agency	None
Industry	**0001**	6	1	1	0	1
	1000	7	3	0	0	7
	2000	16	1	0	0	17
	3000	11	5	0	1	4
	4000	1	0	0	1	2
	5000	9	2	0	0	12
	6000	7	2	0	0	1
	7000	11	1	0	0	4
	8000	18	4	0	4	15
	9000	5	2	0	1	1

Table 23: The influence of industry on the choice of assurance provider (Model 3): absolute numbers

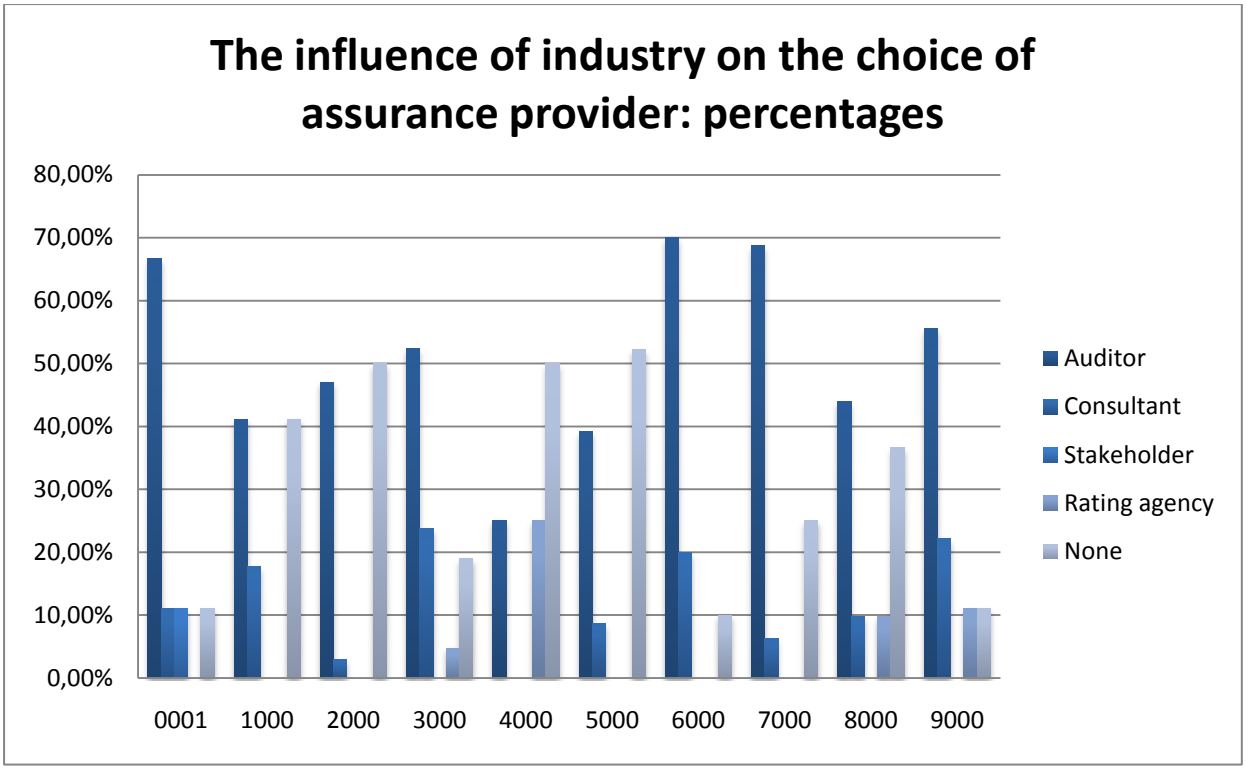


Figure 25: The influence of industry on the choice of assurance provider (Model 3): percentages

The influence of industry on the choice of assurance provider (5): percentages						
Assurance Provider?		Auditor	Consultant	Stakeholder	Rating agency	None
Industry	**0001**	66,67%	11,11%	11,11%	0,00%	11,11%
	1000	41,18%	17,65%	0,00%	0,00%	41,18%
	2000	47,06%	2,94%	0,00%	0,00%	50,00%
	3000	52,38%	23,81%	0,00%	4,76%	19,05%
	4000	25,00%	0,00%	0,00%	25,00%	50,00%
	5000	39,13%	8,70%	0,00%	0,00%	52,17%
	6000	70,00%	20,00%	0,00%	0,00%	10,00%
	7000	68,75%	6,25%	0,00%	0,00%	25,00%
	8000	43,90%	9,76%	0,00%	9,76%	36,59%
	9000	55,56%	22,22%	0,00%	11,11%	11,11%

Table 24: The influence of industry on the choice of assurance provider (Model 3): percentages

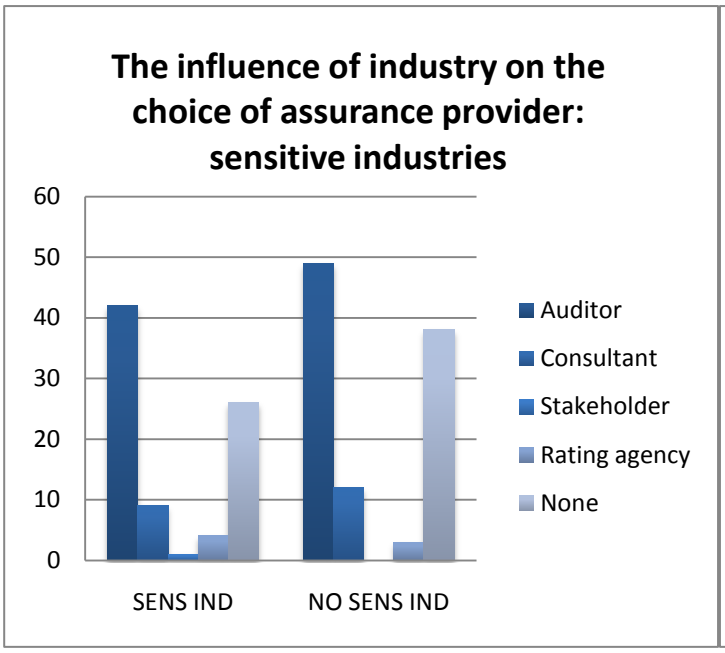


Figure 27: The influence of industry on the choice of assurance provider (Model 3): sensitive industries - absolute numbers

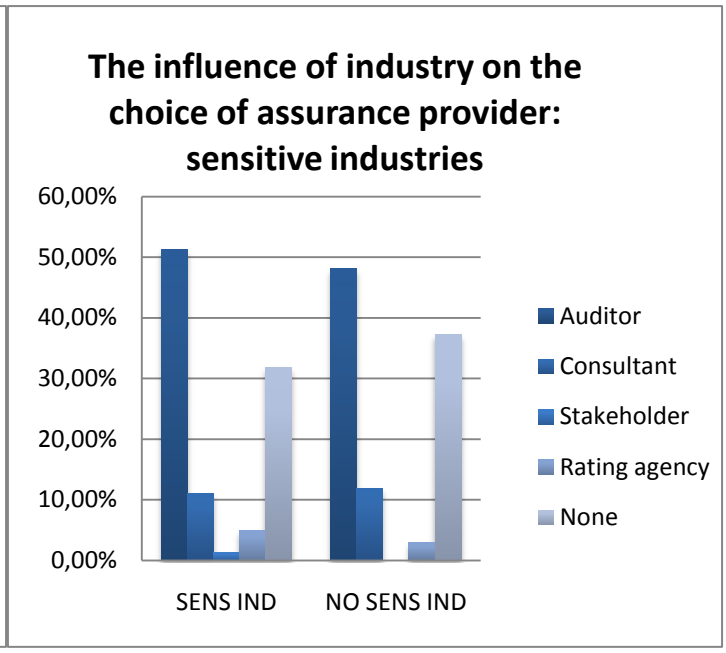


Figure 26: The influence of industry on the choice of assurance provider (Model 3): sensitive industries - percentages

The influence of industry on the choice of assurance provider (5): sensitive industries						
Assurance Provider?		**Auditor**	**Consultant**	**Stakeholder**	**Rating agency**	**None**
Sensitive industry	**SENS IND**	42	9	1	4	26
	NO SENS IND	49	12	0	3	38
	SENS IND	51,22%	10,98%	1,22%	4,88%	31,71%
	NO SENS IND	48,04%	11,76%	0,00%	2,94%	37,25%

Table 25: The influence of industry on the choice of assurance provider (Model 3): sensitive industries

B. The variable 'nationality'

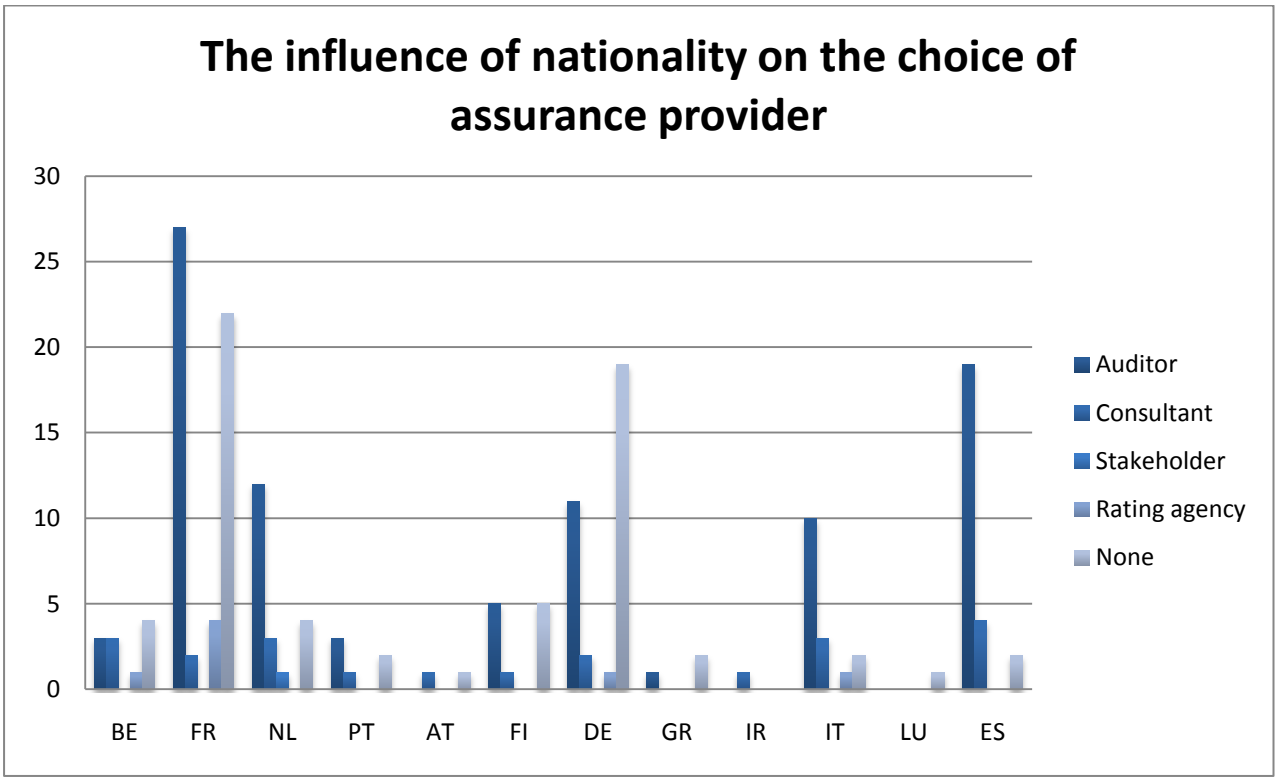


Figure 28: The influence of nationality on the choice of assurance provider (Model 3): absolute numbers

The influence of nationality on the choice of assurance provider (5): absolute numbers								
Assurance Provider?		LAPORTA	NCRI	Auditor	Consultant	Stakeholder	Rating agency	None
Nationality	BE	5	66,7	3	3	0	1	4
	FR	7,49	65,3	27	2	0	4	22
	NL	7	68,3	12	3	1	0	4
	PT	7,34	59,1	3	1	0	0	2
	AT	7	66,7	0	1	0	0	1
	FI	8	72,2	5	1	0	0	5
	DE	5,62	68,0	11	2	0	1	19
	GR	5,09	57,4	1	0	0	0	2
	IR	7,9	66,6	0	1	0	0	0
	IT	5,2	56,9	10	3	0	1	2
	LU	-	-	0	0	0	0	1
	ES	7,9	61,9	19	4	0	0	2

Table 26: The influence of nationality on the choice of assurance provider (Model 3): absolute numbers

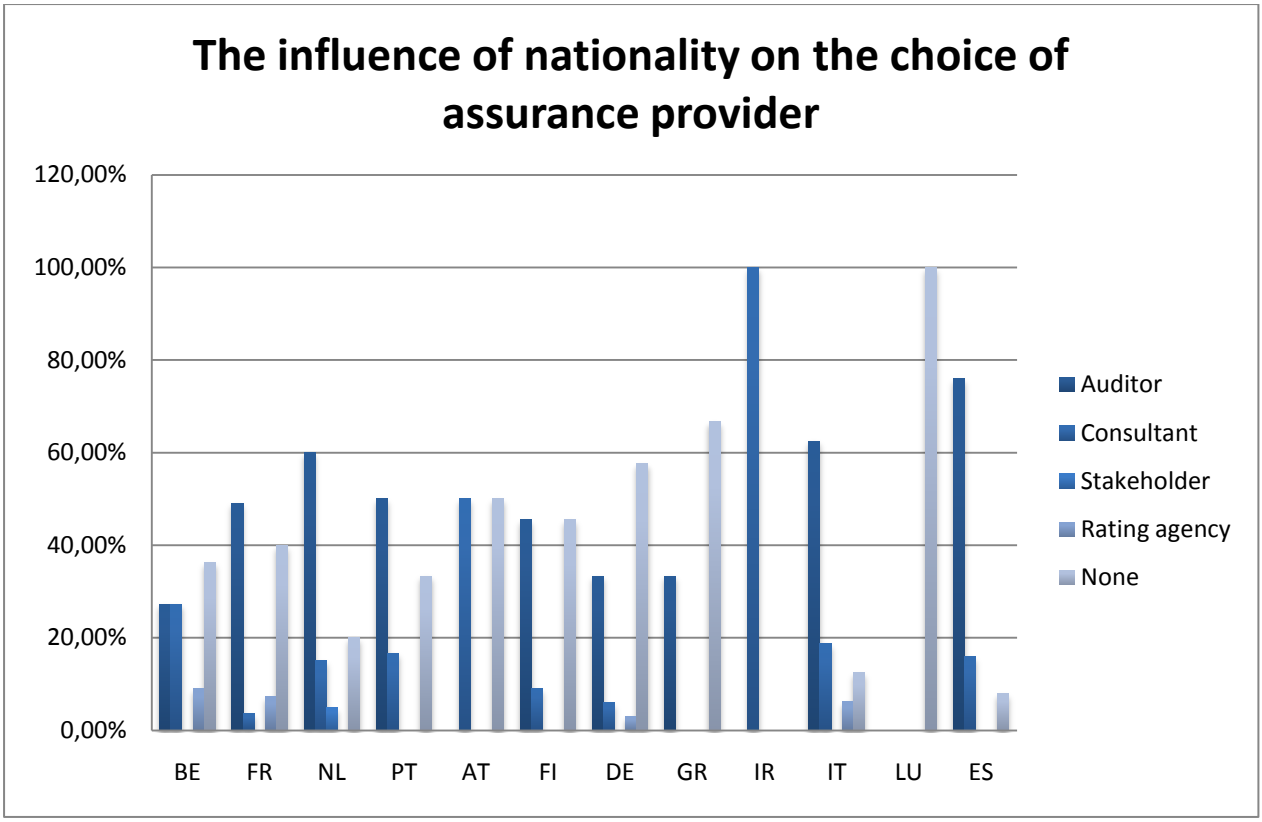


Figure 29: The influence of nationality on the choice of assurance provider (Model 3): percentages

The influence of nationality on the choice of assurance provider (5): percentages								
Assurance Provider?		**LAPORTA**	**NCRI**	**Auditor**	**Consultant**	**Stakeholder**	**Rating agency**	**None**
Nationality	**BE**	**5**	**66,7**	27,27%	27,27%	0,00%	9,09%	36,36%
	FR	**7,49**	**65,3**	49,09%	3,64%	0,00%	7,27%	40,00%
	NL	**7**	**68,3**	60,00%	15,00%	5,00%	0,00%	20,00%
	PT	**7,34**	**59,1**	50,00%	16,67%	0,00%	0,00%	33,33%
	AT	**7**	**66,7**	0,00%	50,00%	0,00%	0,00%	50,00%
	FI	**8**	**72,2**	45,45%	9,09%	0,00%	0,00%	45,45%
	DE	**5,62**	**68,0**	33,33%	6,06%	0,00%	3,03%	57,58%
	GR	**5,09**	**57,4**	33,33%	0,00%	0,00%	0,00%	66,67%
	IR	**7,9**	**66,6**	0,00%	100,00%	0,00%	0,00%	0,00%
	IT	**5,2**	**56,9**	62,50%	18,75%	0,00%	6,25%	12,50%
	LU	**-**	**-**	0,00%	0,00%	0,00%	0,00%	100,00%
	ES	**7,9**	**61,9**	76,00%	16,00%	0,00%	0,00%	8,00%

Table 27: The influence of nationality on the choice of assurance provider (Model 3): percentages

C. Other variables

The influence of other factors on the choice of assurance provider (5)					
Assurance Provider?	**Auditor**	**Consultant**	**Stakeholder**	**Rating agency**	**None**
Ownership	26,54%	25,67%	4,52%	27,42%	33,53%
Media visibility	45,34	26,00	74,00	22,00	88,44
Size (natural log of total assets	23,60	23,58	26,12	23,59	24,28
Profitability	0,24	0,03	0,04	0,04	0,03
Leverage	5,84	8,64	1,12	3,16	8,12
Size (number of employees)	56985	27443	102000	64093	86660

Table 28: The influence of other factors on the choice of assurance provider (Model 3)

Appendix I: New descriptive statistics on sample of 184 CSR reports after outliers modification

Statistics								
	TOTASSETS	PROFITABILITY	LEVERAGE	NCRI	OWNERSHIP	LAPORTA	MEDIA	EMPLOYEES
N Valid	184	184	184	183	179	183	184	184
Missing	0	0	0	1	5	1	0	0
Mean	23,9477	0,105832	6,742246	65,1044	0,3003	6,7886	63,41	10,2758
Median	23,8699	0,027193	2,063087	65,3	0,2246	7,49	21,5	10,505
Std. Deviation	1,91446	0,950802	22,54198	3,92252	0,46675	1,06754	129,318	1,6474
Variance	3,665	0,904	508,141	15,386	0,218	1,14	16723,24	2,714
Skewness	-0,188	13,491	11,238	-0,634	9,695	-0,544	3,729	-0,844
Std. Error of Skewness	0,179	0,179	0,179	0,18	0,182	0,18	0,179	0,179
Kurtosis	1,554	182,654	140,964	-0,031	114,884	-1,396	15,963	0,504
Std. Error of Kurtosis	0,356	0,356	0,356	0,357	0,361	0,357	0,356	0,356
Minimum	16,27	-0,1401	-6,9332	56,9	0	5	0	4,68
Maximum	28,56	12,9099	291,5343	72,2	5,87	8	878	13,08

Table 29: The original descriptive statistics (sample = 184)

Statistics								
	TOTASSETS	PROFITABILITY	LEVERAGE	NCRI	OWNERSHIP	LAPORTA	MEDIA	EMPLOYEES
N Valid	177	177	177	177	177	177	177	177
Missing	0	0	0	0	0	0	0	0
Mean	23,9921	0,037188	4,918567	65,1169	0,2569	6,7994	62,99	10,2332
Median	23,8713	0,027603	2,041506	65,3	0,2045	7,49	21	10,47
Std. Deviation	1,66503	0,056386	7,484249	3,91359	0,19928	1,06698	130,479	1,60754
Skewness	0,464	2,997	3,041	-0,622	0,838	-0,568	3,759	-0,893
Std. Error of Skewness	0,183	0,183	0,183	0,183	0,183	0,183	0,183	0,183
Kurtosis	-0,114	16,016	10,999	-0,011	-0,023	-1,367	16,045	0,603
Std. Error of Kurtosis	0,363	0,363	0,363	0,363	0,363	0,363	0,363	0,363
Minimum	20,62	-0,1026	-6,9332	56,9	0	5	0	4,68
Maximum	28,56	0,416	47,184	72,2	0,92	8	878	12,9

Table 30: The new descriptive statistics (sample = 177)

The mean of variables PROFITABILITY and LEVERAGE decrease considerably, and converge more to the median. Both standard deviations also decrease considerably. Skewness and Kurtosis are converging little to respectively 0 and 3, which indicate that the variables can be more associated to a normal distribution than before the outliers removal. The mean and standard deviation of the other variables do not change considerably. On the next pages, distribution histograms are provided for the ratio variables of the research design. Figures on the left are the distributions on the

original number of sample elements (184 CSR reports), on the right the distributions on the new number of sample elements (177 CSR reports). The variables NCRI and LAPORTA has prescribed values, no outliers can therefore be detected in the sample values.

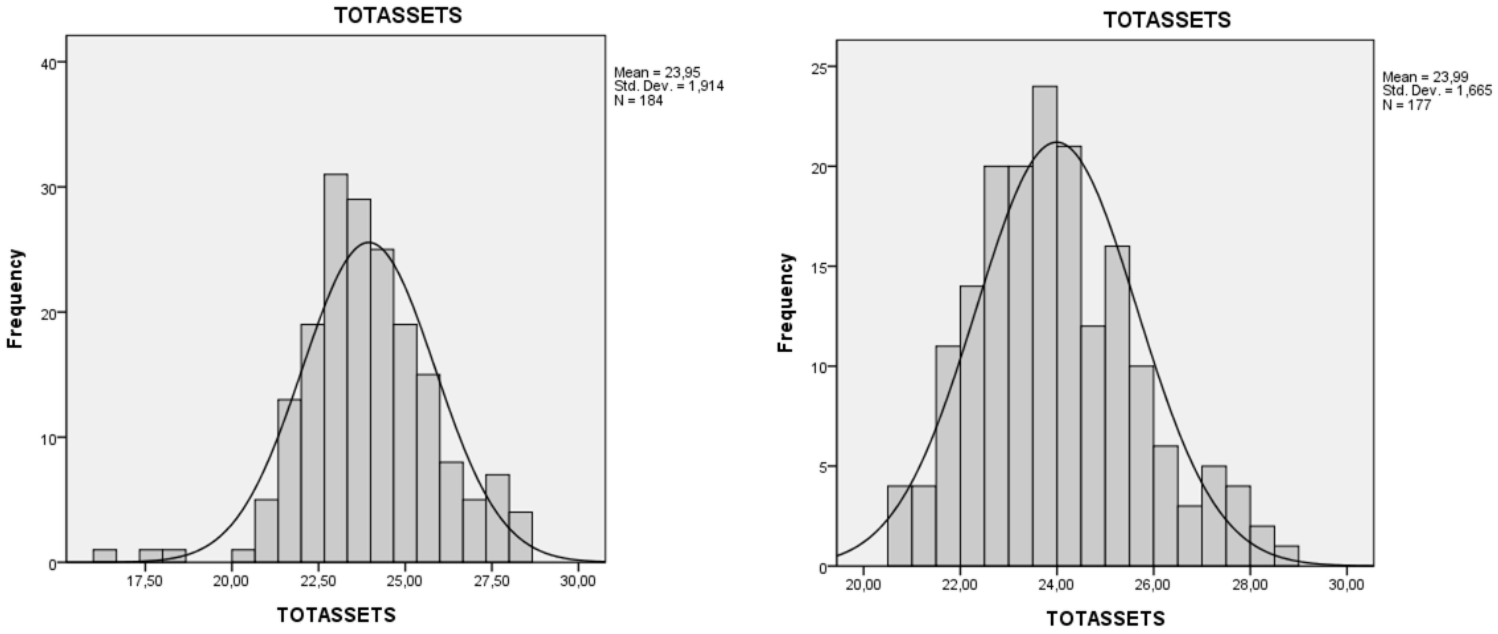


Figure 31: The influence of outliers removal on the distribution of TOTASSETS (sample of 184/177 CSR reports)

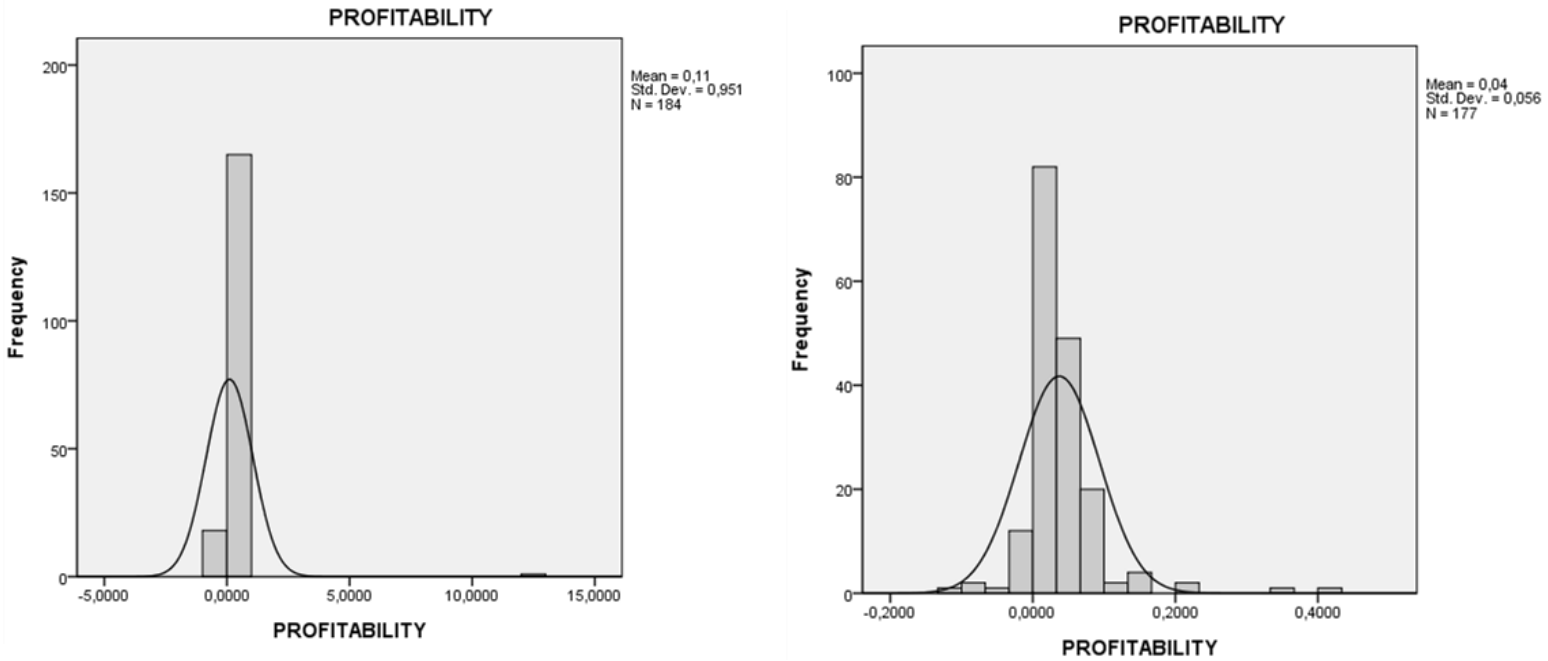


Figure 30: The influence of outliers removal on the distribution of PROFITABILITY (sample of 184/177 CSR reports)

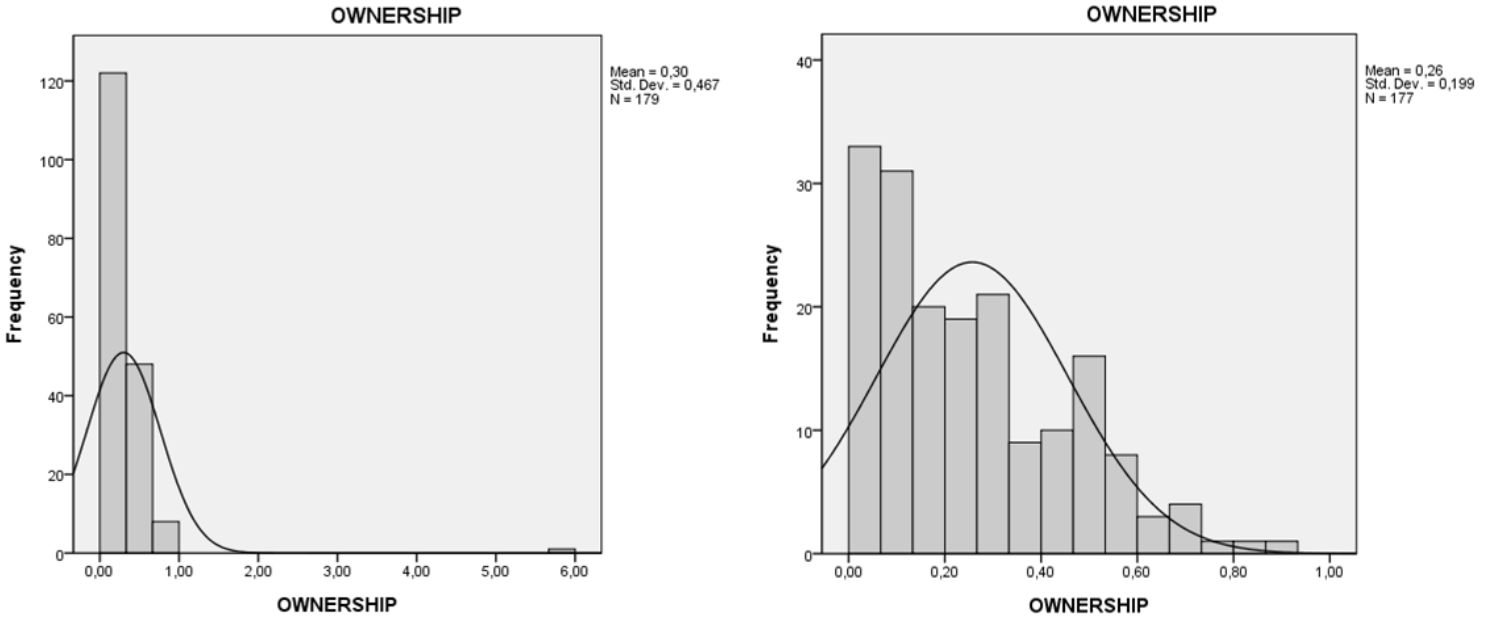


Figure 33: The influence of outliers removal on the distribution of OWNERSHIP (sample of 184/177 CSR reports)

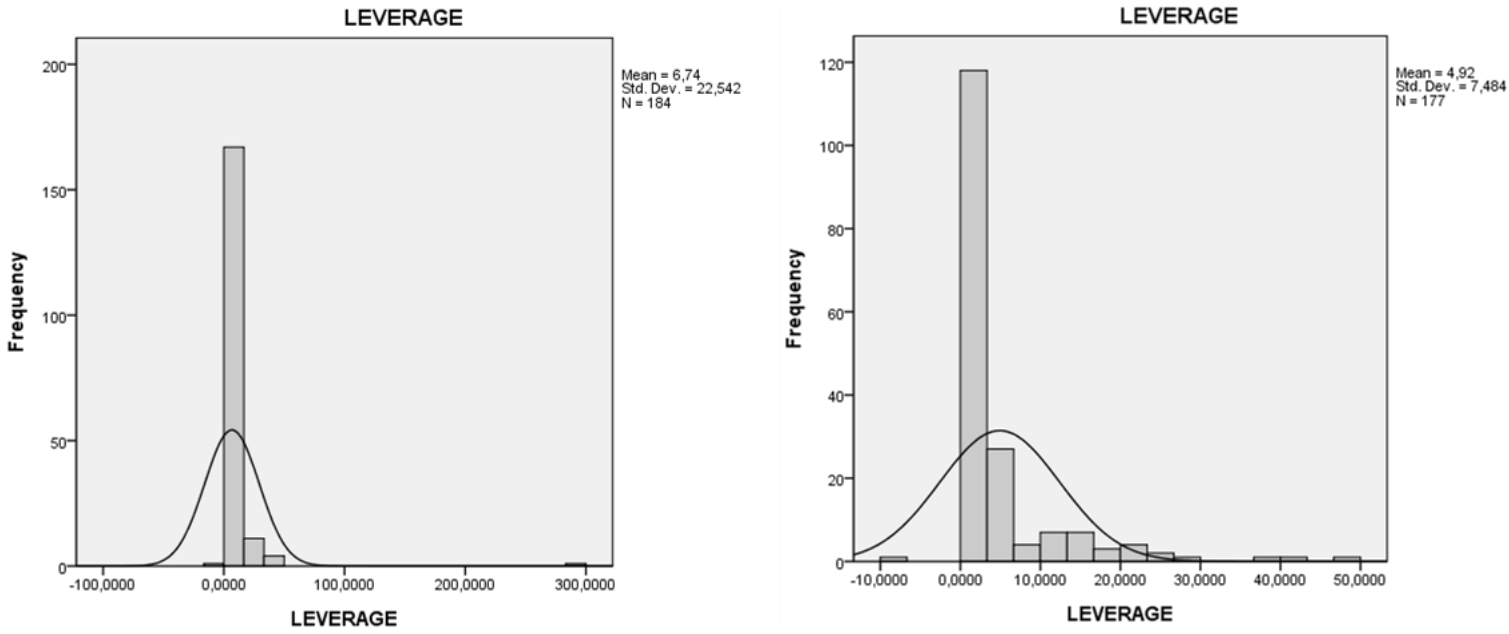


Figure 32: The influence of outliers removal on the distribution of LEVERAGE (sample of 184/177 CSR reports)

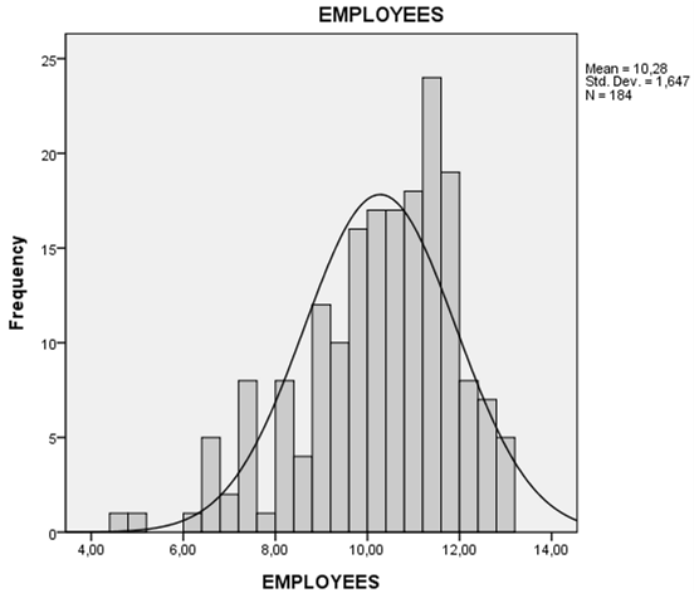
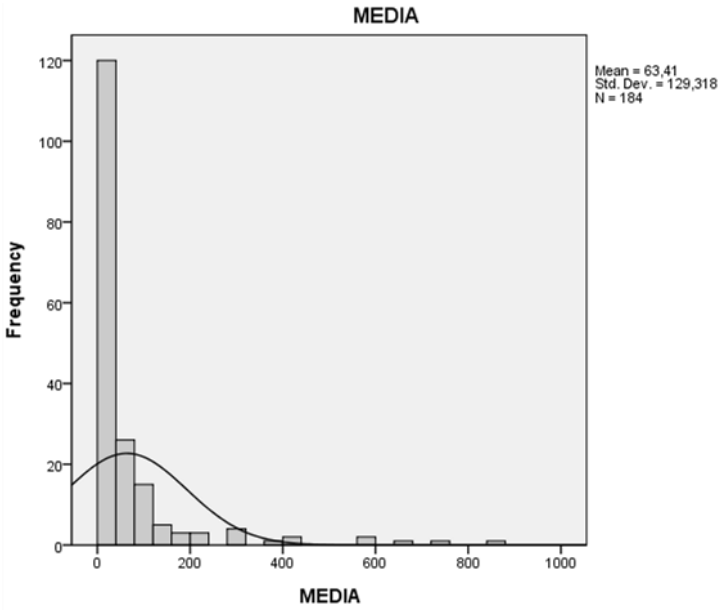


Figure 34: The influence of outliers removal on the distribution of EMPLOYEES (sample of 184/177 CSR reports)



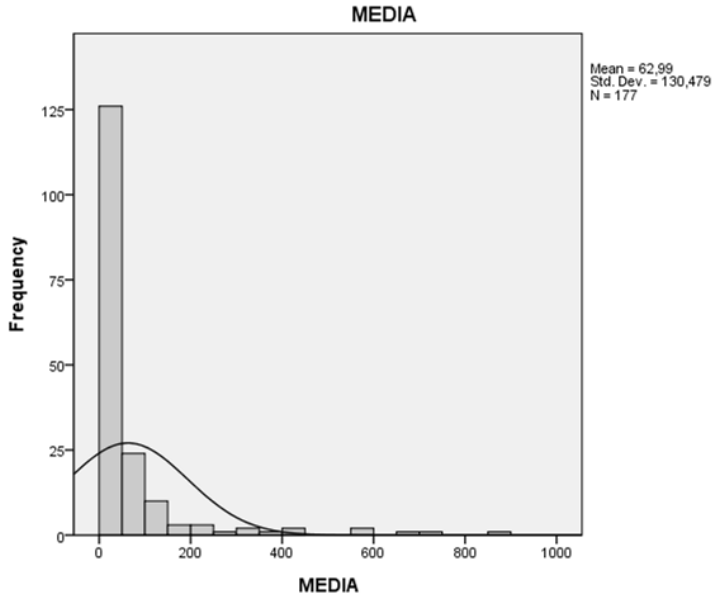


Figure 35: The influence of outliers removal on the distribution of MEDIA (sample of 184/177 CSR reports)

Appendix J: The choice of assurance (Model 1) – correlation matrix

Correlations														
		ASS_YESNO	ICB_0001	ICB_1000	ICB_7000	ICB_8000	TOTASSETS	PROFITABILITY	LEVERAGE	NCRI	OWNERSHIP	LAPORTA	MEDIA	EMPLOYEES
ASS_YESNO	Pearson Correlation	1	0,114	-0,046	0,063	-0,007	,153*	0,007	-0,017	-,198**	0,012	0,119	0,09	0,084
	Sig. (2-tailed)		0,132	0,543	0,407	0,924	0,043	0,923	0,822	0,008	0,879	0,114	0,236	0,264
ICB_0001	Pearson Correlation	0,114	1	-0,075	-0,073	-0,119	-0,006	0,032	-0,097	-0,087	-0,106	-0,01	-0,006	-0,057
	Sig. (2-tailed)	0,132		0,318	0,334	0,115	0,936	0,673	0,199	0,248	0,161	0,9	0,934	0,452
ICB_1000	Pearson Correlation	-0,046	-0,075	1	-0,103	-,168*	-,168*	-0,078	-,177*	,248**	-0,138	-0,038	-0,093	-0,001
	Sig. (2-tailed)	0,543	0,318		0,174	0,026	0,025	0,299	0,018	0,001	0,068	0,614	0,22	0,984
ICB_7000	Pearson Correlation	0,063	-0,073	-0,103	1	-,162*	0,107	-0,004	-0,094	-,227**	,207**	0,031	0,007	-0,107
	Sig. (2-tailed)	0,407	0,334	0,174		0,031	0,156	0,958	0,214	0,002	0,006	0,677	0,925	0,157
ICB_8000	Pearson Correlation	-0,007	-0,119	-,168*	-,162*	1	,543**	-,336**	,714**	-0,114	-0,071	-0,035	0,028	-,169*
	Sig. (2-tailed)	0,924	0,115	0,026	0,031		0	0	0	0,131	0,35	0,64	0,709	0,025
TOTASSETS	Pearson Correlation	,153*	-0,006	-,168*	0,107	,543**	1	-,321**	,642**	-,158*	-0,052	-0,075	,254**	,462**
	Sig. (2-tailed)	0,043	0,936	0,025	0,156	0		0	0	0,036	0,494	0,321	0,001	0
PROFITABILITY	Pearson Correlation	0,007	0,032	-0,078	-0,004	-,336**	-,321**	1	-,235**	0,008	-0,022	-0,005	0,019	0,014
	Sig. (2-tailed)	0,923	0,673	0,299	0,958	0	0		0,002	0,916	0,77	0,944	0,803	0,851
LEVERAGE	Pearson Correlation	-0,017	-0,097	-,177*	-0,094	,714**	,642**	-,235**	1	-0,077	-0,023	-0,114	0,04	0,094
	Sig. (2-tailed)	0,822	0,199	0,018	0,214	0	0	0,002		0,311	0,757	0,132	0,602	0,215
NCRI	Pearson Correlation	-,198**	-0,087	,248**	-,227**	-0,114	-,158*	0,008	-0,077	1	-0,124	,150*	0,114	0,107
	Sig. (2-tailed)	0,008	0,248	0,001	0,002	0,131	0,036	0,916	0,311		0,1	0,046	0,129	0,156
OWNERSHIP	Pearson Correlation	0,012	-0,106	-0,138	,207**	-0,071	-0,052	-0,022	-0,023	-0,124	1	0,02	-,175*	-,181*

	Sig. (2-tailed)	0,879	0,161	0,068	0,006	0,35	0,494	0,77	0,757	0,1		0,787	0,02	0,016
LAPORTA	Pearson Correlation	0,119	-0,01	-0,038	0,031	-0,035	-0,075	-0,005	-0,114	,150*	0,02	1	-0,015	-0,037
	Sig. (2-tailed)	0,114	0,9	0,614	0,677	0,64	0,321	0,944	0,132	0,046	0,787		0,843	0,622
MEDIA	Pearson Correlation	0,09	-0,006	-0,093	0,007	0,028	,254**	0,019	0,04	0,114	-,175*	-0,015	1	,289**
	Sig. (2-tailed)	0,236	0,934	0,22	0,925	0,709	0,001	0,803	0,602	0,129	0,02	0,843		0
LOG_EMPL	Pearson Correlation	0,084	-0,057	-0,001	-0,107	-,169*	,462**	0,014	0,094	0,107	-,181*	-0,037	,289**	1
	Sig. (2-tailed)	0,264	0,452	0,984	0,157	0,025	0	0,851	0,215	0,156	0,016	0,622	0	

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 31: The choice of assurance (Model 1) - correlation matrix

Appendix K: The choice of assurance (Model 1) – statistical output

Logistic Regression

Case Processing Summary			
Unweighted Cases		**N**	**Percent**
Selected Cases	Included in Analysis	177	100
	Missing Cases	0	0
	Total	177	100
Unselected Cases		0	0
Total		177	100

Dependent Variable Encoding	
Original Value	**Internal Value**
ASS_NO	0
ASS_YES	1

Block 0: Beginning Block

Classification Table(a)(,)(b)					
			Predicted ASS_YESNO		Percentage Correct
	Observed		ASS_NO	ASS_YES	
Step 0	ASS_YESNO	ASS_NO	0	61	0
		ASS_YES	0	116	100
	Overall Percentage				65,5

a. Constant is included in the model.

b. The cut value is ,500

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	0,643	0,158	16,514	1	0	1,902

Variables not in the Equation					
			Score	df	Sig.
Step 0	Variables	ICB_0001	2,289	1	0,13
		ICB_1000	0,375	1	0,54
		ICB_7000	0,697	1	0,404
		ICB_8000	0,009	1	0,923
		TOTASSETS	4,119	1	0,042
		PROFITABILITY	0,009	1	0,922
		LEVERAGE	0,051	1	0,821
		NCRI	6,911	1	0,009
		OWNERSHIP	0,024	1	0,878
		LAPORTA	2,512	1	0,113
		LOG_EMPL	1,26	1	0,262
		MEDIA	1,42	1	0,233
	Overall Statistics		19,864	12	0,07

Block 1: Method = Enter

Omnibus Tests of Model Coefficients				
		Chi-square	Df	Sig.
Step 1	Step	21,443	12	0,044
	Block	21,443	12	0,044
	Model	21,443	12	0,044

Model Summary			
Step 1	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
	206,555a	0,114	0,158

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than ,001.

Classification Table(a)					
			Predicted ASS_YESNO		Percentage Correct
	Observed		ASS_NO	ASS_YES	
Step 1	ASS_YESNO	ASS_NO	20	41	32,8
		ASS_YES	15	101	87,1
	Overall Percentage				68,4

a. The cut value is ,500

Variables in the Equation							
		B	**S.E.**	**Wald**	**df**	**Sig.**	**Exp(B)**
Step 1a	**ICB_0001**	1,395	1,165	1,433	1	0,231	4,033
	ICB_1000	0,33	0,593	0,31	1	0,578	1,391
	ICB_7000	-0,296	0,736	0,162	1	0,687	0,744
	ICB_8000	-0,337	0,803	0,177	1	0,674	0,714
	TOTASSETS	0,372	0,212	3,074	1	0,08	1,45
	PROFITABILITY	2,091	3,328	0,395	1	0,53	8,091
	LEVERAGE	-0,036	0,036	0,968	1	0,325	0,965
	NCRI	-0,125	0,049	6,534	1	0,011	0,883
	OWNERSHIP	0,252	0,921	0,075	1	0,784	1,287
	LAPORTA	0,332	0,164	4,113	1	0,043	1,394
	LOG_EMPL	-0,035	0,173	0,041	1	0,839	0,965
	MEDIA	0,001	0,002	0,752	1	0,386	1,001
	Constant	-2,004	5,284	0,144	1	0,704	0,135

a. Variable(s) entered on step 1: ICB_0001, ICB_1000, ICB_7000, ICB_8000, TOTASSETS, PROFITABILITY, LEVERAGE, NCRI, OWNERSHIP, LAPORTA, LOG_EMPL, MEDIA.

Table 32: The choice of assurance (Model 1) - statistical output out of SPSS

Appendix L: New descriptive statistics on sample of 120 assurance statements after outliers modification

Statistics								
	TOTASSETS	PROFITABILITY	LEVERAGE	NCRI	OWNERSHIP	LAPORTA	MEDIA	EMPLOYEES
N Valid	120	120	120	120	118	120	120	120
Missing	0	0	0	0	2	0	0	0
Mean	24,1329	0,035406	7,222812	64,56	0,3183	6,8725	73,05	10,4143
Median	24,0016	0,029056	2,044157	65,3	0,2273	7,49	23,5	10,7941
Std. Deviation	1,83404	0,049637	27,10326	4,05142	0,55674	1,06725	139,08	1,6283
Skewness	-0,288	0,554	9,897	-0,458	8,634	-0,715	3,39	-0,844
Std. Error of Skewness	0,221	0,221	0,221	0,221	0,223	0,221	0,221	0,221
Kurtosis	1,293	3,8	103,99	-0,411	85,942	-1,159	13,297	0,3
Std. Error of Kurtosis	0,438	0,438	0,438	0,438	0,442	0,438	0,438	0,438
Minimum	17,48	-0,1401	-6,9332	56,9	0	5	0	4,96
Maximum	28,35	0,2257	291,5343	72,2	5,87	8	878	13,08

Table 33: The original descriptive statistics (sample = 120)

Statistics								
	TOTASSETS	PROFITABILITY	LEVERAGE	NCRI	OWNERSHIP	LAPORTA	MEDIA	EMPLOYEES
N Valid	116	116	116	116	116	116	116	116
Missing	0	0	0	0	0	0	0	0
Mean	24,1758	0,037486	4,826403	64,5578	0,2586	6,8913	71,44	10,3331
Median	24,0016	0,030579	2,037784	65,3	0,2173	7,49	22,5	10,725
Std. Deviation	1,60554	0,047496	7,109878	4,03056	0,19978	1,06624	139,861	1,59206
Skewness	0,282	0,974	2,954	-0,431	0,795	-0,75	3,456	-0,903
Std. Error of Skewness	0,225	0,225	0,225	0,225	0,225	0,225	0,225	0,225
Kurtosis	-0,046	3,523	11,699	-0,391	-0,007	-1,105	13,63	0,328
Std. Error of Kurtosis	0,446	0,446	0,446	0,446	0,446	0,446	0,446	0,446
Minimum	20,77	-0,1026	-6,9332	56,9	0	5	0	4,96
Maximum	28,35	0,2257	47,184	72,2	0,92	8	878	12,9

Table 34: The new descriptive statistics (sample = 116)

Only the standard deviation of LEVERAGE decreases considerably. The sample elements that influenced the values of variable PROFITABILITY have been removed when using the sample of assured CSR reports (120 assurance statements). The distribution histograms are again provided on the next pages of this appendix. The figures on the left are the distributions of the original sample of 120 assurance statements, the figures on the right are the distributions of the

new sample of 116 assurance statements. The variables NCRI and LAPORTA are again free of outliers, because of their prescribed values.

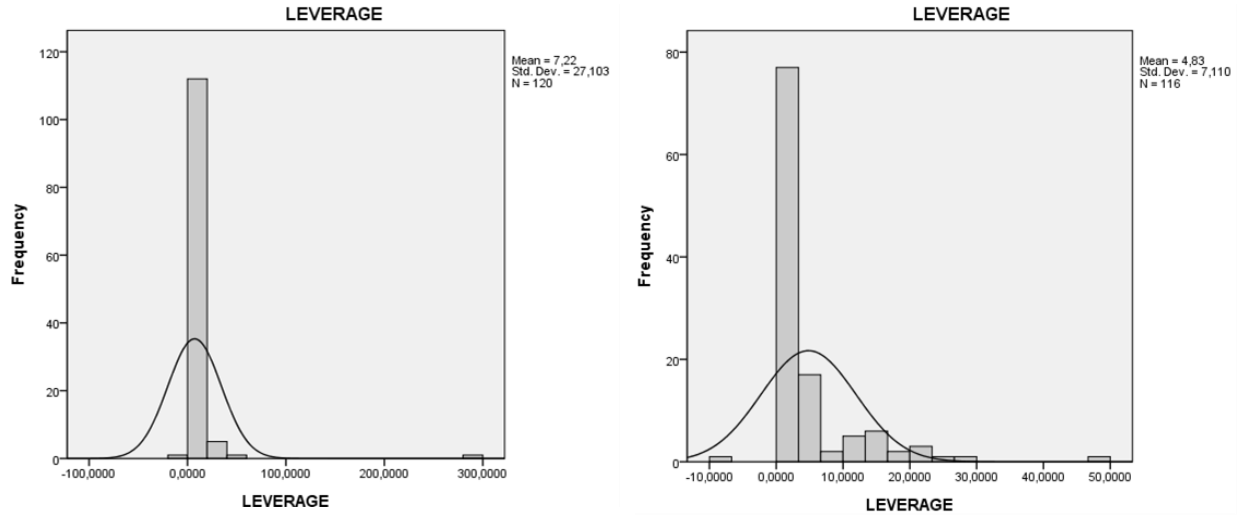


Figure 36: The influence of outliers removal on the distribution of LEVERAGE (120/116 assurance statements)

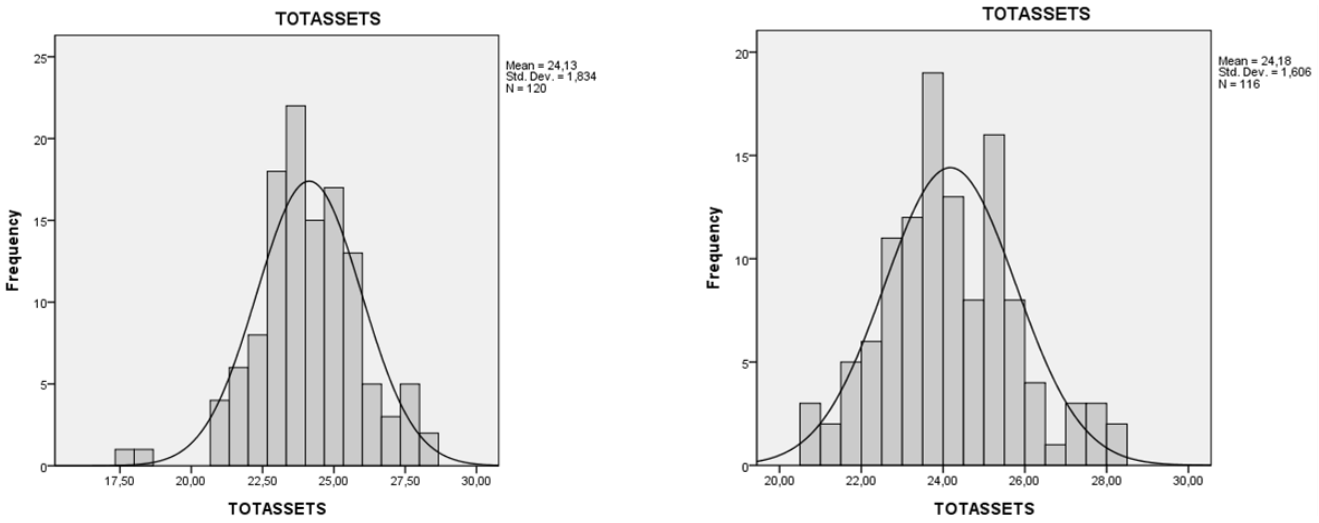


Figure 37: The influence of outliers removal on the distribution of TOTASSETS (120/116 assurance statements)

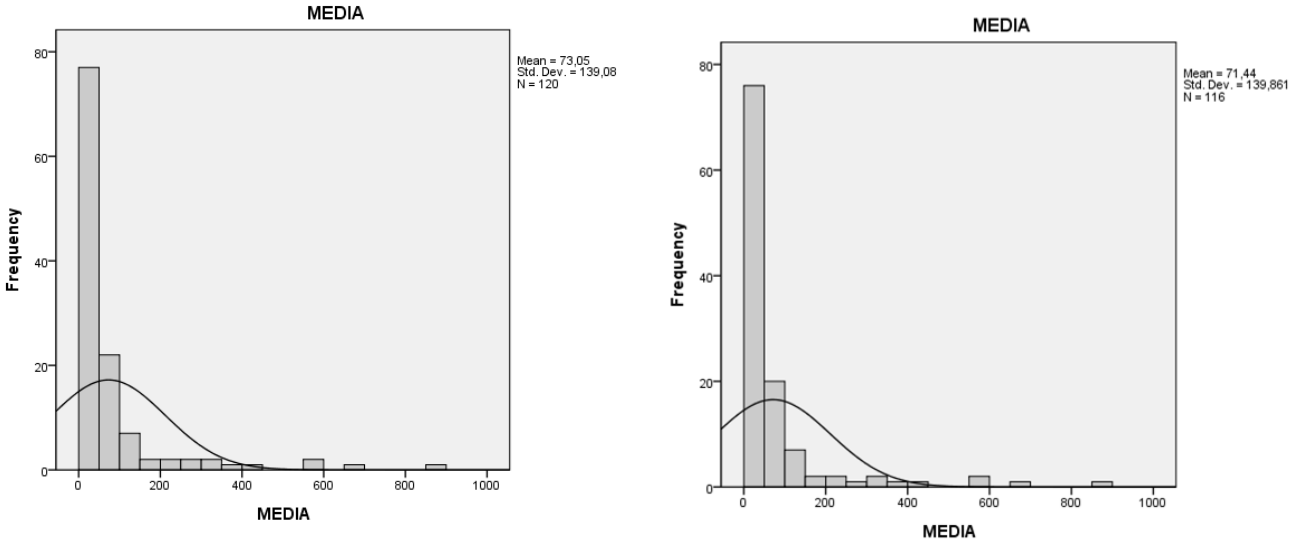


Figure 38: The influence of outliers removal on the distribution of MEDIA (120/116 assurance statements)

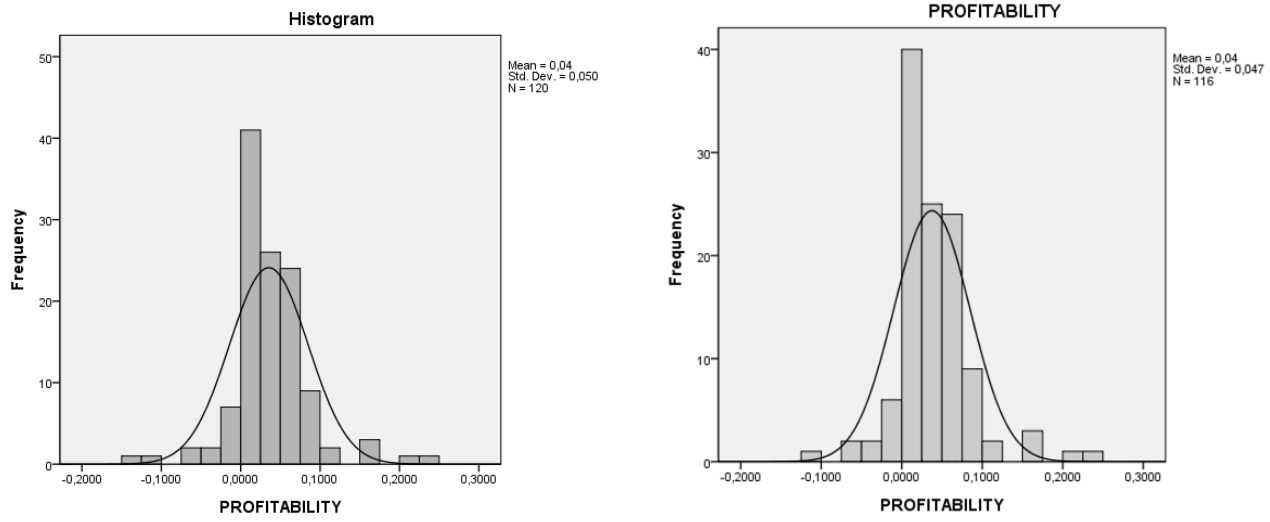


Figure 39: The influence of outliers removal on the distribution of PROFITABILITY (120/116 assurance statements)

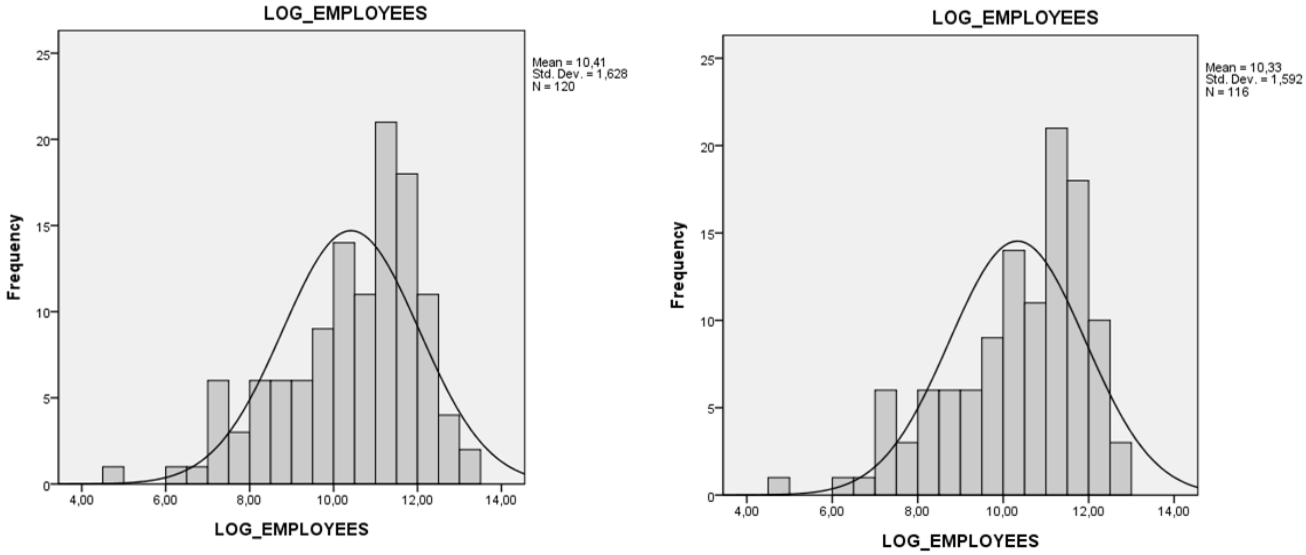


Figure 41: The influence of outliers removal on the distribution of EMPLOYEES (120/116 assurance statements)

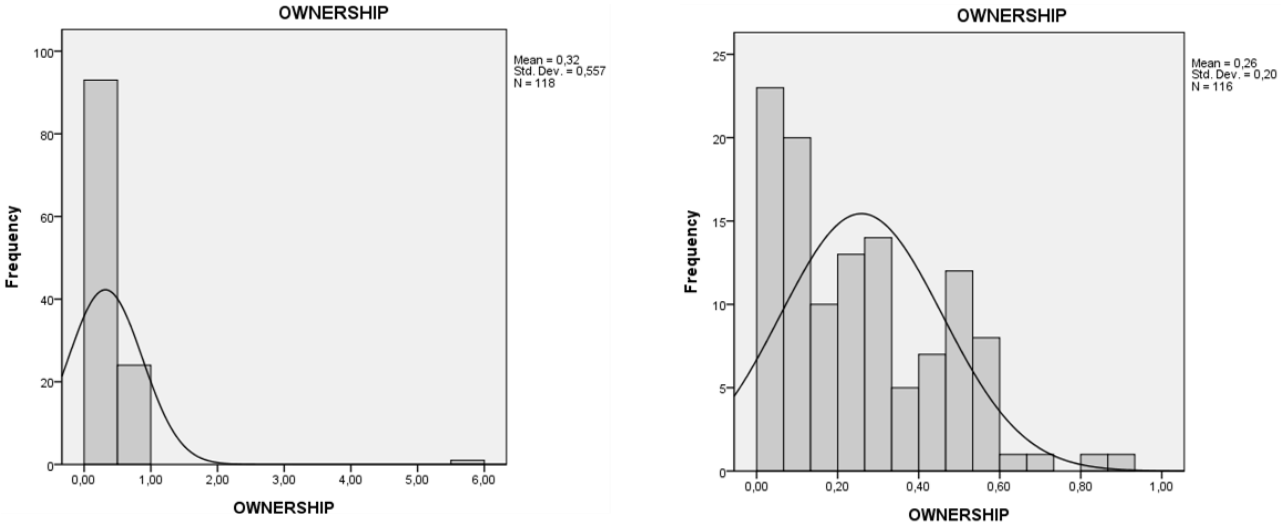


Figure 40: The influence of outliers removal on the distribution of OWNERSHIP (120/116 assurance statements)

Appendix M: The choice of assurance provider (Model 2) – correlation matrix

Correlations															
		ASS_BIG4	ICB_0001	ICB_1000	ICB_7000	ICB_8000	TOTASSETS	PROFITABILITY	LEVERAGE	NCRI	OWNERSHIP	LAPORTA	MEDIA	EMPLOYEES
ASS_BIG4	Pearson Correlation	1	-0,066	-0,092	0,141	-0,076	,230*	0,029	0,075	-0,037	0,026	0,148	,206*	,186*
	Sig. (2-tailed)		0,48	0,325	0,131	0,416	0,013	0,756	0,426	0,694	0,781	0,112	0,027	0,045
ICB_0001	Pearson Correlation	-0,066	1	-0,084	-0,092	-0,139	-0,016	0,06	-0,119	-0,076	-0,108	-0,058	-0,014	-0,084
	Sig. (2-tailed)	0,48		0,372	0,324	0,137	0,867	0,52	0,205	0,418	0,25	0,534	0,883	0,369
ICB_1000	Pearson Correlation	-0,092	-0,084	1	-0,104	-0,157	-0,089	-0,102	-,188*	,283**	-0,167	0,064	-0,071	0,099
	Sig. (2-tailed)	0,325	0,372		0,265	0,093	0,342	0,275	0,043	0,002	0,074	0,496	0,451	0,289
ICB_7000	Pearson Correlation	0,141	-0,092	-0,104	1	-0,173	0,078	0,023	-0,102	-0,128	,254**	0,011	-0,034	-0,177
	Sig. (2-tailed)	0,131	0,324	0,265		0,063	0,403	0,81	0,277	0,172	0,006	0,904	0,715	0,057
ICB_8000	Pearson Correlation	-0,076	-0,139	-0,157	-0,173	1	,530**	-,393**	,752**	-,193*	-0,076	0,042	0,033	-0,141
	Sig. (2-tailed)	0,416	0,137	0,093	0,063		0	0	0	0,038	0,416	0,652	0,722	0,131
TOTASSETS	Pearson Correlation	,230*	-0,016	-0,089	0,078	,530**	1	-,365**	,611**	-0,117	-0,091	0,016	,214*	,325**
	Sig. (2-tailed)	0,013	0,867	0,342	0,403	0		0	0	0,211	0,332	0,861	0,021	0
PROFITABILITY	Pearson Correlation	0,029	0,06	-0,102	0,023	-,393**	-,365**	1	-,283**	0,077	0,044	-0,134	0,064	-0,018
	Sig. (2-tailed)	0,756	0,52	0,275	0,81	0	0		0,002	0,409	0,642	0,151	0,497	0,846
LEVERAGE	Pearson Correlation	0,075	-0,119	-,188*	-0,102	,752**	,611**	-,283**	1	-0,134	-0,074	-0,017	0,042	0,017
	Sig. (2-tailed)	0,426	0,205	0,043	0,277	0	0	0,002		0,152	0,431	0,854	0,651	0,857
NCRI	Pearson Correlation	-0,037	-0,076	,283**	-0,128	-,193*	-0,117	0,077	-0,134	1	-,217*	,198*	0,169	,189*
	Sig. (2-tailed)	0,694	0,418	0,002	0,172	0,038	0,211	0,409	0,152		0,02	0,033	0,07	0,042
OWNERSHIP	Pearson Correlation	0,026	-0,108	-0,167	,254**	-0,076	-0,091	0,044	-0,074	-,217*	1	-0,091	-,216*	-0,15

	Sig. (2-tailed)	0,781	0,25	0,074	0,006	0,416	0,332	0,642	0,431	0,02		0,333	0,02	0,107
LAPORTA	Pearson Correlation	0,148	-0,058	0,064	0,011	0,042	0,016	-0,134	-0,017	,198*	-0,091	1	0,002	0,022
	Sig. (2-tailed)	0,112	0,534	0,496	0,904	0,652	0,861	0,151	0,854	0,033	0,333		0,979	0,817
MEDIA	Pearson Correlation	,206*	-0,014	-0,071	-0,034	0,033	,214*	0,064	0,042	0,169	-,216*	0,002	1	,267**
	Sig. (2-tailed)	0,027	0,883	0,451	0,715	0,722	0,021	0,497	0,651	0,07	0,02	0,979		0,004
EMPLOYEES	Pearson Correlation	,186*	-0,084	0,099	-0,177	-0,141	,325**	-0,018	0,017	,189*	-0,15	0,022	,267**	1
	Sig. (2-tailed)	0,045	0,369	0,289	0,057	0,131	0	0,846	0,857	0,042	0,107	0,817	0,004	

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 35: The choice of assurance provider (Model 2) - correlation matrix

Appendix N: The choice of assurance provider (Model 2) – statistical output

Logistic Regression

Case Processing Summary			
Unweighted Cases		**N**	**Percent**
Selected Cases	Included in Analysis	116	100
	Missing Cases	0	0
	Total	116	100
Unselected Cases		0	0
Total		116	100

Dependent Variable Encoding	
Original Value	**Internal Value**
ASS_NONBIG4	0
ASS_BIG4	1

Block 0: Beginning Block

Classification Table(a)(,)(b)					
			ASS_BIG4		Percentage Correct
	Observed		ASS_NONBIG4	ASS_BIG4	
Step 0	ASS_BIG4	ASS_NONBIG4	0	31	0
		ASS_BIG4	0	85	100
	Overall Percentage				73,3

a. Constant is included in the model.
b. The cut value is
,500

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	1,009	0,21	23,111	1	0	2,742

Variables not in the Equation					
			Score	df	Sig.
Step 0	Variables	ICB_0001	0,51	1	0,475
		ICB_1000	0,985	1	0,321
		ICB_7000	2,312	1	0,128
		ICB_8000	0,675	1	0,411
		TOTASSETS	6,121	1	0,013
		PROFITABILITY	0,098	1	0,754
		LEVERAGE	0,645	1	0,422
		NCRI	0,158	1	0,691
		OWNERSHIP	0,079	1	0,778
		LAPORTA	2,55	1	0,11
		MEDIA	4,91	1	0,027
		LOG_EMPLOYEES	4,03	1	0,045
	Overall Statistics		22,519	12	0,032

Block 1: Method = Enter

Omnibus Tests of Model Coefficients				
		Chi-square	df	Sig.
Step 1	Step	27,277	12	0,007
	Block	27,277	12	0,007
	Model	27,277	12	0,007

Model Summary			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	107,398a	0,21	0,305

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than ,001.

Classification Table(a)					
			ASS_BIG4		Percentage Correct
	Observed		ASS_NONBIG4	ASS_BIG4	
Step 1	ASS_BIG4	ASS_NONBIG4	10	21	32,3
		ASS_BIG4	6	79	92,9
	Overall Percentage				76,7

a. The cut value is
,500

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1a	ICB_0001	-0,753	0,98	0,591	1	0,442	0,471
	ICB_1000	-0,445	0,833	0,285	1	0,593	0,641
	ICB_7000	0,872	1,243	0,492	1	0,483	2,392
	ICB_8000	-2	1,072	3,479	1	0,062	0,135
	TOTASSETS	0,433	0,259	2,789	1	0,095	1,541
	PROFITABILITY	2,117	5,684	0,139	1	0,71	8,302
	LEVERAGE	0,054	0,06	0,801	1	0,371	1,055
	NCRI	-0,07	0,063	1,216	1	0,27	0,932
	OWNERSHIP	0,984	1,388	0,503	1	0,478	2,676
	LAPORTA	0,49	0,233	4,405	1	0,036	1,632
	MEDIA	0,011	0,006	3,26	1	0,071	1,011
	EMPLOYEES	0,055	0,218	0,063	1	0,802	1,056
	Constant	-9,265	6,858	1,825	1	0,177	0

a. Variable(s) entered on step 1: ICB_0001, ICB_1000, ICB_7000, ICB_8000, TOTASSETS, PROFITABILITY, LEVERAGE, NCRI, OWNERSHIP, LAPORTA, MEDIA, LOG_EMPLOYEES.

Table 36: The choice of assurance provider (Model 2) - statistical output out of SPSS

Appendix O: The choice of assurance provider (Model 3) – correlation matrix

Correlations														
		ASS_LIKERT	**ICB_0001**	**ICB_1000**	**ICB_7000**	**ICB_8000**	**TOTASSETS**	**PROFITABILITY**	**LEVERAGE**	**NCRI**	**OWNERSHIP**	**LAPORTA**	**MEDIA**	**EMPLOYEES**
ASS_LIKERT	Pearson Correlation	1	0,11	-0,082	0,101	-0,051	,197**	0,031	-0,007	-,192*	0,009	0,136	0,137	0,123
	Sig. (2-tailed)		0,145	0,28	0,18	0,502	0,008	0,678	0,927	0,011	0,907	0,071	0,068	0,103
ICB_0001	Pearson Correlation	0,11	1	-0,075	-0,073	-0,119	-0,006	0,032	-0,097	-0,087	-0,106	-0,01	-0,006	-0,057
	Sig. (2-tailed)	0,145		0,318	0,334	0,115	0,936	0,673	0,199	0,248	0,161	0,9	0,934	0,452
ICB_1000	Pearson Correlation	-0,082	-0,075	1	-0,103	-,168*	-,168*	-0,078	-,177*	,248**	-0,138	-0,038	-0,093	-0,001
	Sig. (2-tailed)	0,28	0,318		0,174	0,026	0,025	0,299	0,018	0,001	0,068	0,614	0,22	0,984
ICB_7000	Pearson Correlation	0,101	-0,073	-0,103	1	-,162*	0,107	-0,004	-0,094	-,227**	,207**	0,031	0,007	-0,107
	Sig. (2-tailed)	0,18	0,334	0,174		0,031	0,156	0,958	0,214	0,002	0,006	0,677	0,925	0,157
ICB_8000	Pearson Correlation	-0,051	-0,119	-,168*	-,162*	1	,543**	-,336**	,714**	-0,114	-0,071	-0,035	0,028	-,169*
	Sig. (2-tailed)	0,502	0,115	0,026	0,031		0	0	0	0,131	0,35	0,64	0,709	0,025
TOTASSETS	Pearson Correlation	,197**	-0,006	-,168*	0,107	,543**	1	-,321**	,642**	-,158*	-0,052	-0,075	,254**	,462**
	Sig. (2-tailed)	0,008	0,936	0,025	0,156	0		0	0	0,036	0,494	0,321	0,001	0
PROFITABILITY	Pearson Correlation	0,031	0,032	-0,078	-0,004	-,336**	-,321**	1	-,235**	0,008	-0,022	-0,005	0,019	0,014
	Sig. (2-tailed)	0,678	0,673	0,299	0,958	0	0		0,002	0,916	0,77	0,944	0,803	0,851
LEVERAGE	Pearson Correlation	-0,007	-0,097	-,177*	-0,094	,714**	,642**	-,235**	1	-0,077	-0,023	-0,114	0,04	0,094
	Sig. (2-tailed)	0,927	0,199	0,018	0,214	0	0	0,002		0,311	0,757	0,132	0,602	0,215
NCRI	Pearson Correlation	-,192*	-0,087	,248**	-,227**	-0,114	-,158*	0,008	-0,077	1	-0,124	,150*	0,114	0,107
	Sig. (2-tailed)	0,011	0,248	0,001	0,002	0,131	0,036	0,916	0,311		0,1	0,046	0,129	0,156
OWNERSHIP	Pearson Correlation	0,009	-0,106	-0,138	,207**	-0,071	-0,052	-0,022	-0,023	-0,124	1	0,02	-,175*	-,181*
	Sig. (2-tailed)	0,907	0,161	0,068	0,006	0,35	0,494	0,77	0,757	0,1		0,787	0,02	0,016

LAPORTA	Pearson Correlation	0,136	-0,01	-0,038	0,031	-0,035	-0,075	-0,005	-0,114	,150*	0,02	1	-0,015	-0,037
	Sig. (2-tailed)	0,071	0,9	0,614	0,677	0,64	0,321	0,944	0,132	0,046	0,787		0,843	0,622
MEDIA	Pearson Correlation	0,137	-0,006	-0,093	0,007	0,028	,254**	0,019	0,04	0,114	-,175*	-0,015	1	,289**
	Sig. (2-tailed)	0,068	0,934	0,22	0,925	0,709	0,001	0,803	0,602	0,129	0,02	0,843		0
EMPLOYEES	Pearson Correlation	0,123	-0,057	-0,001	-0,107	-,169*	,462**	0,014	0,094	0,107	-,181*	-0,037	,289**	1
	Sig. (2-tailed)	0,103	0,452	0,984	0,157	0,025	0	0,851	0,215	0,156	0,016	0,622	0	

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 37: The choice of assurance provider (Model 3) - correlation matrix

Appendix P: The choice of assurance provider (Model 3) – statistical output

PLUM - Ordinal Regression

Case Processing Summary			
		N	Marginal Percentage
ASS_LIKERT	0	61	34,50%
	1	7	4,00%
	2	1	0,60%
	3	21	11,90%
	4	87	49,20%
Valid		177	100,00%
Missing		0	
Total		177	

Model Fitting Information				
Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	398,65			
Final	367,83	30,82	12	0,002

Link function: Logit.

Goodness-of-Fit			
	Chi-Square	Df	Sig.
Pearson	799,741	692	0,003
Deviance	367,83	692	1

Link function: Logit.

Pseudo R-Square	
Cox and Snell	0,16
Nagelkerke	0,179
McFadden	0,077

Link function: Logit.

Parameter Estimates								
							95% Confidence Interval	
		Estimate	Std. Error	Wald	df	Sig.	Lower Bound	Upper Bound
Threshold	**[ASS_LIKERT5 = 0]**	3,578	4,83	0,549	1	0,459	-5,888	13,045
	[ASS_LIKERT5 = 1]	3,775	4,831	0,611	1	0,435	-5,693	13,243
	[ASS_LIKERT5 = 2]	3,803	4,831	0,62	1	0,431	-5,666	13,271
	[ASS_LIKERT5 = 3]	4,37	4,833	0,817	1	0,366	-5,103	13,843
Location	**ICB_0001**	0,575	0,807	0,507	1	0,476	-1,007	2,156
	ICB_1000	0,235	0,54	0,189	1	0,664	-0,823	1,292
	ICB_7000	-0,006	0,665	0	1	0,993	-1,31	1,298
	ICB_8000	-0,756	0,72	1,104	1	0,293	-2,167	0,655
	TOTASSETS	0,4	0,193	4,301	1	0,038	0,022	0,778
	PROFITABILITY	1,703	2,916	0,341	1	0,559	-4,012	7,417
	LEVERAGE	-0,025	0,033	0,557	1	0,455	-0,09	0,04
	NCRI	-0,113	0,043	6,899	1	0,009	-0,197	-0,029
	OWNERSHIP	0,463	0,819	0,32	1	0,572	-1,142	2,069
	LAPORTA	0,369	0,148	6,211	1	0,013	0,079	0,659
	MEDIA	0,003	0,002	3,184	1	0,074	0	0,006
	LOG_EMPLOYEES	-0,051	0,155	0,108	1	0,742	-0,355	0,253

Link function: Logit.

Table 38: The choice of assurance provider (Model 3) - statistical output out of SPSS

Appendix Q: Robustness check with variable 'ASS_AUDCONS' - statistical output

Logistic Regression

Case Processing Summary			
Unweighted Cases		**N**	**Percent**
Selected Cases	Included in Analysis	108	100
	Missing Cases	0	0
	Total	108	100
Unselected Cases		0	0
Total		108	100

Dependent Variable Encoding	
Original Value	**Internal Value**
CONSULTANT	0
AUDITOR	1

Block 0: Beginning Block

Classification Table(a)(,)(b)					
			ASS_AUDCONS		Percentage Correct
	Observed		CONSULTANT	AUDITOR	
Step 0	ASS_AUDCONS	CONSULTANT	0	21	0
		AUDITOR	0	87	100
	Overall Percentage				80,6

a. Constant is included in the model.

b. The cut value is ,500

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	1,421	0,243	34,177	1	0	4,143

Variables not in the Equation					
			Score	df	Sig.
Step 0	Variables	ICB_0001	0,127	1	0,721
		ICB_1000	0,784	1	0,376
		ICB_7000	1,064	1	0,302
		ICB_8000	0,005	1	0,945
		TOTASSETS	3,946	1	0,047
		PROFITABILITY	0,077	1	0,782
		LEVERAGE	1,16	1	0,281
		NCRI	0	1	0,985
		OWNERSHIP	0,104	1	0,747
		LAPORTA	1,602	1	0,206
		MEDIA	3,463	1	0,063
		LOG_EMPLOYEES	2,118	1	0,146
	Overall Statistics		12,659	12	0,394

Block 1: Method = Enter

Omnibus Tests of Model Coefficients				
		Chi-square	df	Sig.
Step 1	Step	16,371	12	0,175
	Block	16,371	12	0,175
	Model	16,371	12	0,175

Model Summary			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	90,032a	0,141	0,224

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than ,001.

Classification Table(a)					
			ASS_AUDCONS		
	Observed		CONSULTANT	AUDITOR	
Step 1	ASS_AUDCONS	CONSULTANT	3	18	14,3
		AUDITOR	3	84	96,6
	Overall Percentage				80,6

a. The cut value is ,500

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1a	**ICB_0001**	0,838	1,228	0,466	1	0,495	2,312
	ICB_1000	-0,3	0,886	0,115	1	0,735	0,741
	ICB_7000	0,852	1,292	0,435	1	0,51	2,345
	ICB_8000	-1,33	1,218	1,192	1	0,275	0,265
	TOTASSETS	0,312	0,335	0,866	1	0,352	1,366
	PROFITABILITY	-0,85	6,113	0,019	1	0,889	0,427
	LEVERAGE	0,065	0,082	0,638	1	0,425	1,067
	NCRI	-0,009	0,072	0,016	1	0,898	0,991
	OWNERSHIP	1,606	1,598	1,01	1	0,315	4,982
	LAPORTA	0,388	0,259	2,257	1	0,133	1,475
	MEDIA	0,01	0,007	2,539	1	0,111	1,011
	EMPLOYEES	0,081	0,239	0,116	1	0,733	1,085
	Constant	-9,82	9,008	1,188	1	0,276	0

a. Variable(s) entered on step 1: ICB_0001, ICB_1000, ICB_7000, ICB_8000, TOTASSETS, PROFITABILITY, LEVERAGE, NCRI, OWNERSHIP, LAPORTA, MEDIA, LOG_EMPLOYEES.

Table 39: The choice of assurance provider (auditor versus consultant) - statistical output out of SPSS

Appendix R: Robustness check with variable 'INDUSTRY' – main statistical output

1. The effect of adding the variable ICB_SENS

Model 1 : The choice of assurance (Model 1), adding the variable ICB_SENS

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1a	**ICB_SENS**	0,283	0,443	0,408	1	0,523	1,327
	TOTASSETS	0,274	0,188	2,12	1	0,145	1,315
	PROFITABILITY	2,249	3,311	0,461	1	0,497	9,474
	LEVERAGE	-0,047	0,032	2,165	1	0,141	0,954
	NCRI	-0,119	0,046	6,58	1	0,01	0,888
	OWNERSHIP	0,175	0,897	0,038	1	0,846	1,191
	LAPORTA	0,313	0,161	3,771	1	0,052	1,368
	MEDIA	0,001	0,002	0,686	1	0,407	1,001
	EMPLOYEES	0,042	0,148	0,08	1	0,777	1,043
	Constant	-0,745	5,115	0,021	1	0,884	0,475

Table 40: The choice of assurance (Model 1), removal of ICB_SENS - main statistical output

Model 2: The choice of assurance provider (Model 2), adding the variable ICB_SENS

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1a	**ICB_SENS**	-0,53	0,573	0,854	1	0,355	0,589
	TOTASSETS	0,432	0,231	3,48	1	0,062	1,54
	PROFITABILITY	4,65	5,332	0,761	1	0,383	104,628
	LEVERAGE	-0,004	0,042	0,011	1	0,915	0,996
	NCRI	-0,064	0,059	1,15	1	0,283	0,938
	OWNERSHIP	1,275	1,303	0,958	1	0,328	3,579
	LAPORTA	0,46	0,225	4,2	1	0,04	1,584
	MEDIA	0,01	0,006	3,218	1	0,073	1,01
	EMPLOYEES	0,084	0,183	0,211	1	0,646	1,088
	Constant	-9,848	6,452	2,33	1	0,127	0

Table 41: The choice of assurance provider (Model 2), removal of ICB_SENS - main statistical output

Model 3: The choice of assurance provider (Model 3), adding the variable ICB_SENS

Parameter Estimates								
							95% Confidence Interval	
		Estimate	Std. Error	Wald	df	Sig.	Lower Bound	Upper Bound
Threshold	**[ASS_LIKERT5 = 0]**	2,88	4,642	0,385	1	0,535	-6,217	11,978
	[ASS_LIKERT5 = 1]	3,075	4,642	0,439	1	0,508	-6,024	12,174
	[ASS_LIKERT5 = 2]	3,103	4,642	0,447	1	0,504	-5,996	12,202
	[ASS_LIKERT5 = 3]	3,661	4,645	0,621	1	0,431	-5,442	12,764
Location	**ICB_SENS**	0,132	0,396	0,112	1	0,738	-0,643	0,908
	TOTASSETS	0,324	0,172	3,553	1	0,059	-0,013	0,661
	PROFITABILITY	2,471	2,923	0,714	1	0,398	-3,259	8,2
	LEVERAGE	-0,051	0,03	2,941	1	0,086	-0,11	0,007
	NCRI	-0,111	0,041	7,317	1	0,007	-0,192	-0,031
	OWNERSHIP	0,547	0,798	0,47	1	0,493	-1,017	2,111
	LAPORTA	0,356	0,146	5,928	1	0,015	0,069	0,643
	MEDIA	0,003	0,002	3,026	1	0,082	0	0,006
	EMPLOYEES	0,047	0,133	0,123	1	0,726	-0,214	0,307

Table 42: The choice of assurance provider (Model 3), removal of ICB_SENS - main statistical output

2. The variable ICB_SENS: correlation matrix of Model 3

Correlations											
		ASS_LIKERT	ICB_SENS	TOTASSETS	PROFITABILITY	LEVERAGE	NCRI	OWNERSHIP	LAPORTA	MEDIA	EMPLOYEES
ASS_LIKERT	Pearson Correlation	1	0,049	,182*	0,013	-0,031	-,192*	0,021	0,147	0,131	0,12
	Sig. (2-tailed)		0,516	0,015	0,864	0,677	0,01	0,777	0,051	0,082	0,111
ICB_SENS	Pearson Correlation	0,049	1	,413**	-,304**	,386**	-0,124	-0,058	-0,025	-0,025	-,221**
	Sig. (2-tailed)	0,516		0	0	0	0,099	0,445	0,741	0,74	0,003
TOTASSETS	Pearson Correlation	,182*	,413**	1	-,321**	,642**	-,158*	-0,052	-0,075	,254**	,462**
	Sig. (2-tailed)	0,015	0		0	0	0,036	0,494	0,321	0,001	0
PROFITABILITY	Pearson Correlation	0,013	-,304**	-,321**	1	-,235**	0,008	-0,022	-0,005	0,019	0,014
	Sig. (2-tailed)	0,864	0	0		0,002	0,916	0,77	0,944	0,803	0,851
LEVERAGE	Pearson Correlation	-0,031	,386**	,642**	-,235**	1	-0,077	-0,023	-0,114	0,04	0,094
	Sig. (2-tailed)	0,677	0	0	0,002		0,311	0,757	0,132	0,602	0,215
NCRI	Pearson Correlation	-,192*	-0,124	-,158*	0,008	-0,077	1	-0,124	,150*	0,114	0,107
	Sig. (2-tailed)	0,01	0,099	0,036	0,916	0,311		0,1	0,046	0,129	0,156
OWNERSHIP	Pearson Correlation	0,021	-0,058	-0,052	-0,022	-0,023	-0,124	1	0,02	-,175*	-,181*
	Sig. (2-tailed)	0,777	0,445	0,494	0,77	0,757	0,1		0,787	0,02	0,016
LAPORTA	Pearson Correlation	0,147	-0,025	-0,075	-0,005	-0,114	,150*	0,02	1	-0,015	-0,037
	Sig. (2-tailed)	0,051	0,741	0,321	0,944	0,132	0,046	0,787		0,843	0,622
MEDIA	Pearson Correlation	0,131	-0,025	,254**	0,019	0,04	0,114	-,175*	-0,015	1	,289**
	Sig. (2-tailed)	0,082	0,74	0,001	0,803	0,602	0,129	0,02	0,843		0
EMPLOYEES	Pearson Correlation	0,12	-,221**	,462**	0,014	0,094	0,107	-,181*	-0,037	,289**	1
	Sig. (2-tailed)	0,111	0,003	0	0,851	0,215	0,156	0,016	0,622	0	

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 43: Robustness check (variable 'ICB_SENS') - Correlation matrix Model 3

Appendix S: Robustness check with variable 'NATIONALITY' – main statistical output

1. The correction for low-producing countries

Model 1 : The choice of assurance (Model 1), removing sample elements from Greece, Ireland and Luxembourg (Sample = 173)

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1a	**ICB_0001**	1,332	1,172	1,291	1	0,256	3,789
	ICB_1000	0,235	0,603	0,152	1	0,696	1,265
	ICB_7000	-0,338	0,739	0,209	1	0,647	0,713
	ICB_8000	-0,216	0,818	0,07	1	0,792	0,806
	TOTASSETS	0,369	0,213	3,009	1	0,083	1,447
	PROFITABILITY	1,757	3,352	0,275	1	0,6	5,793
	LEVERAGE	-0,041	0,037	1,265	1	0,261	0,96
	NCRI	-0,146	0,053	7,666	1	0,006	0,864
	OWNERSHIP	-0,057	0,933	0,004	1	0,952	0,945
	LAPORTA	0,276	0,169	2,677	1	0,102	1,318
	MEDIA	0,001	0,002	0,598	1	0,439	1,001
	EMPLOYEES	-0,023	0,174	0,017	1	0,896	0,978
	Constant	-0,168	5,524	0,001	1	0,976	0,845

Table 44: The choice of assurance (Model 1), correction for low producing countries - main statistical output

Model 2: The choice of assurance provider (Model 2), removing sample elements from Greece, Ireland and Luxembourg (Sample = 114)

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1a	**ICB_0001**	-0,731	0,99	0,546	1	0,46	0,481
	ICB_1000	-0,136	0,894	0,023	1	0,879	0,872
	ICB_7000	0,855	1,251	0,467	1	0,494	2,351
	ICB_8000	-2,208	1,102	4,018	1	0,045	0,11
	TOTASSETS	0,504	0,277	3,317	1	0,069	1,656
	PROFITABILITY	0,53	5,99	0,008	1	0,929	1,699
	LEVERAGE	0,055	0,061	0,811	1	0,368	1,056
	NCRI	-0,06	0,066	0,844	1	0,358	0,941
	OWNERSHIP	0,969	1,413	0,47	1	0,493	2,634
	LAPORTA	0,556	0,239	5,397	1	0,02	1,744
	MEDIA	0,011	0,006	3,245	1	0,072	1,011
	EMPLOYEES	0,025	0,226	0,012	1	0,913	1,025
	Constant	-11,666	7,454	2,449	1	0,118	0

Table 45: The choice of assurance provider (Model 2), correction for low producing countries - main statistical output

Model 3: The choice of assurance provider (Model 3), removing the sample elements from Greece, Ireland and Luxembourg (Sample = 173)

Parameter Estimates								
							95% Confidence Interval	
		Estimate	Std. Error	Wald	df	Sig.	Lower Bound	Upper Bound
Threshold	**[ASS_LIKERT = 0]**	3,219	5,054	0,406	1	0,524	-6,687	13,125
	[ASS_LIKERT = 1]	3,422	5,055	0,458	1	0,498	-6,486	13,33
	[ASS_LIKERT = 2]	3,451	5,055	0,466	1	0,495	-6,457	13,359
	[ASS_LIKERT = 3]	4,008	5,057	0,628	1	0,428	-5,904	13,92
Location	**ICB_0001**	0,517	0,812	0,406	1	0,524	-1,075	2,109
	ICB_1000	0,286	0,553	0,267	1	0,606	-0,799	1,37
	ICB_7000	-0,018	0,667	0,001	1	0,978	-1,326	1,29
	ICB_8000	-0,721	0,731	0,973	1	0,324	-2,153	0,711
	TOTASSETS	0,419	0,195	4,611	1	0,032	0,037	0,801
	PROFITABILITY	1,289	2,927	0,194	1	0,66	-4,447	7,026
	LEVERAGE	-0,029	0,034	0,747	1	0,387	-0,095	0,037
	NCRI	-0,122	0,045	7,242	1	0,007	-0,211	-0,033
	OWNERSHIP	0,192	0,832	0,054	1	0,817	-1,438	1,822
	LAPORTA	0,353	0,152	5,364	1	0,021	0,054	0,652
	MEDIA	0,003	0,002	2,876	1	0,09	0	0,006
	EMPLOYEES	-0,051	0,156	0,107	1	0,744	-0,358	0,255

Table 46: The choice of assurance provider (Model 3), correction for low producing countries - main statistical output

2. The effect of removing the variable LAPORTA

Model 1 : The choice of assurance (Model 1), removing the variable LAPORTA

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1a	**ICB_0001**	1,351	1,145	1,391	1	0,238	3,859
	ICB_1000	0,214	0,583	0,134	1	0,714	1,238
	ICB_7000	-0,232	0,727	0,102	1	0,749	0,793
	ICB_8000	-0,253	0,781	0,105	1	0,746	0,776
	TOTASSETS	0,367	0,206	3,158	1	0,076	1,443
	PROFITABILITY	1,802	3,196	0,318	1	0,573	6,064
	LEVERAGE	-0,045	0,035	1,642	1	0,2	0,956
	NCRI	-0,112	0,05	5,088	1	0,024	0,894
	OWNERSHIP	0,265	0,897	0,087	1	0,768	1,303
	MEDIA	0,001	0,002	0,62	1	0,431	1,001
	EMPLOYEES	-0,036	0,166	0,046	1	0,83	0,965
	Constant	-0,398	5,201	0,006	1	0,939	0,672

Table 47: The choice of assurance (Model 1), removal of LAPORTA - main statistical output

Model 2: The choice of assurance provider (Model 2), removing the variable LAPORTA

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1a	**ICB_0001**	-0,828	0,944	0,769	1	0,38	0,437
	ICB_1000	-0,462	0,828	0,312	1	0,577	0,63
	ICB_7000	0,886	1,205	0,541	1	0,462	2,425
	ICB_8000	-1,872	1,049	3,184	1	0,074	0,154
	TOTASSETS	0,41	0,243	2,862	1	0,091	1,507
	PROFITABILITY	0,271	5,433	0,002	1	0,96	1,311
	LEVERAGE	0,048	0,065	0,54	1	0,463	1,049
	NCRI	-0,035	0,062	0,327	1	0,568	0,965
	OWNERSHIP	0,673	1,316	0,262	1	0,609	1,96
	MEDIA	0,01	0,006	3,208	1	0,073	1,01
	EMPLOYEES	0,038	0,199	0,036	1	0,85	1,038
	Constant	-7,292	6,488	1,263	1	0,261	0,001

Table 48: The choice of assurance provider (Model 2), removal of LAPORTA - main statistical output

Model 3: The choice of assurance provider (Model 3), removing the variable LAPORTA

Parameter Estimates								
							95% Confidence Interval	
		Estimate	Std. Error	Wald	df	Sig.	Lower Bound	Upper Bound
Threshold	**[ASS_LIKERT = 0]**	2,195	4,701	0,218	1	0,641	-7,019	11,409
	[ASS_LIKERT = 1]	2,387	4,702	0,258	1	0,612	-6,828	11,601
	[ASS_LIKERT = 2]	2,414	4,702	0,264	1	0,608	-6,801	11,629
	[ASS_LIKERT = 3]	2,962	4,703	0,397	1	0,529	-6,257	12,18
Location	**ICB_0001**	0,615	0,802	0,587	1	0,443	-0,957	2,186
	ICB_1000	0,176	0,531	0,11	1	0,741	-0,865	1,217
	ICB_7000	0,076	0,657	0,013	1	0,908	-1,211	1,363
	ICB_8000	-0,637	0,7	0,827	1	0,363	-2,008	0,735
	TOTASSETS	0,407	0,187	4,74	1	0,029	0,041	0,773
	PROFITABILITY	1,48	2,851	0,269	1	0,604	-4,109	7,068
	LEVERAGE	-0,034	0,032	1,149	1	0,284	-0,097	0,029
	NCRI	-0,096	0,043	4,897	1	0,027	-0,18	-0,011
	OWNERSHIP	0,394	0,802	0,242	1	0,623	-1,178	1,966
	MEDIA	0,003	0,002	2,866	1	0,09	0	0,006
	EMPLOYEES	-0,064	0,149	0,186	1	0,666	-0,357	0,228

Table 49: The choice of assurance provider (Model 3), removal of LAPORTA - main statistical output

3. The effect of removing the variable NCRI

Model 1 : The choice of assurance (Model 1), removing the variable NCRI

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1a	**ICB_0001**	1,435	1,13	1,613	1	0,204	4,198
	ICB_1000	-0,003	0,574	0	1	0,996	0,997
	ICB_7000	-0,018	0,725	0,001	1	0,98	0,982
	ICB_8000	-0,304	0,792	0,148	1	0,701	0,738
	TOTASSETS	0,447	0,216	4,273	1	0,039	1,563
	PROFITABILITY	2,512	3,262	0,593	1	0,441	12,333
	LEVERAGE	-0,044	0,035	1,539	1	0,215	0,957
	OWNERSHIP	0,297	0,902	0,108	1	0,742	1,346
	MEDIA	0,001	0,002	0,249	1	0,618	1,001
	EMPLOYEES	-0,081	0,17	0,23	1	0,631	0,922
	LAPORTA	0,259	0,156	2,747	1	0,097	1,296
	Constant	-10,947	4,24	6,667	1	0,01	0

Table 50: The choice of assurance (Model 1), removal of NCRI - main statistical output

Model 2: The choice of assurance provider (Model 2), removing the variable NCRI

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1a	**ICB_0001**	-0,636	0,945	0,453	1	0,501	0,53
	ICB_1000	-0,648	0,811	0,639	1	0,424	0,523
	ICB_7000	0,977	1,25	0,61	1	0,435	2,655
	ICB_8000	-1,881	1,052	3,195	1	0,074	0,153
	TOTASSETS	0,46	0,265	3,026	1	0,082	1,584
	PROFITABILITY	1,789	5,661	0,1	1	0,752	5,986
	LEVERAGE	0,05	0,062	0,65	1	0,42	1,052
	OWNERSHIP	1,154	1,378	0,702	1	0,402	3,172
	MEDIA	0,01	0,006	2,947	1	0,086	1,01
	EMPLOYEES	0,032	0,213	0,022	1	0,882	1,032
	LAPORTA	0,42	0,221	3,608	1	0,058	1,521
	Constant	-13,738	5,809	5,593	1	0,018	0

Table 51: The choice of assurance provider (Model 2), removal of NCRI - main statistical output

Model 3: The choice of assurance provider (Model 3), removing the variable NCRI

Parameter Estimates								
							95% Confidence Interval	
		Estimate	Std. Error	Wald	df	Sig.	Lower Bound	Upper Bound
Threshold	**[ASS_LIKERT = 0]**	11,595	3,852	9,061	1	0,003	4,045	19,144
	[ASS_LIKERT = 1]	11,784	3,855	9,344	1	0,002	4,228	19,339
	[ASS_LIKERT = 2]	11,81	3,855	9,384	1	0,002	4,254	19,367
	[ASS_LIKERT = 3]	12,356	3,865	10,221	1	0,001	4,781	19,932
Location	**ICB_0001**	0,702	0,787	0,794	1	0,373	-0,842	2,245
	ICB_1000	-0,112	0,524	0,045	1	0,831	-1,139	0,916
	ICB_7000	0,179	0,657	0,074	1	0,785	-1,109	1,467
	ICB_8000	-0,727	0,715	1,035	1	0,309	-2,128	0,674
	TOTASSETS	0,466	0,196	5,655	1	0,017	0,082	0,849
	PROFITABILITY	1,855	2,889	0,412	1	0,521	-3,806	7,517
	LEVERAGE	-0,031	0,032	0,91	1	0,34	-0,094	0,032
	OWNERSHIP	0,453	0,808	0,314	1	0,575	-1,131	2,037
	MEDIA	0,002	0,002	1,913	1	0,167	-0,001	0,005
	EMPLOYEES	-0,087	0,153	0,323	1	0,57	-0,388	0,213
	LAPORTA	0,297	0,142	4,344	1	0,037	0,018	0,576

Table 52: The choice of assurance provider (Model 3), removal of NCRI - main statistical output

Appendix T: Robustness check with variable 'SIZE'– main statistical output

1. The effect of removing the variable EMPLOYEES

Model 1 : The choice of assurance (Model 1), removing the variable EMPLOYEES

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1a	**ICB_0001**	1,441	1,143	1,59	1	0,207	4,226
	ICB_1000	0,341	0,591	0,332	1	0,565	1,406
	ICB_7000	-0,238	0,677	0,123	1	0,725	0,788
	ICB_8000	-0,236	0,628	0,141	1	0,708	0,79
	TOTASSETS	0,342	0,154	4,916	1	0,027	1,408
	PROFITABILITY	2,043	3,325	0,378	1	0,539	7,712
	LEVERAGE	-0,036	0,036	0,97	1	0,325	0,965
	OWNERSHIP	0,291	0,903	0,104	1	0,748	1,337
	MEDIA	0,001	0,002	0,734	1	0,392	1,001
	LAPORTA	0,332	0,164	4,117	1	0,042	1,394
	NCRI	-0,126	0,049	6,687	1	0,01	0,882
	Constant	-1,642	4,958	0,11	1	0,741	0,194

Table 53: The choice of assurance (Model 1), removal of EMPLOYEES - main statistical output

Model 2: The choice of assurance provider (Model 2), removing the variable EMPLOYEES

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1a	**ICB_0001**	-0,824	0,938	0,771	1	0,38	0,439
	ICB_1000	-0,46	0,83	0,307	1	0,579	0,631
	ICB_7000	0,76	1,156	0,433	1	0,511	2,139
	ICB_8000	-2,115	0,969	4,762	1	0,029	0,121
	TOTASSETS	0,469	0,218	4,634	1	0,031	1,598
	PROFITABILITY	2,114	5,669	0,139	1	0,709	8,281
	LEVERAGE	0,052	0,06	0,772	1	0,38	1,054
	OWNERSHIP	0,909	1,345	0,456	1	0,499	2,482
	MEDIA	0,011	0,006	3,327	1	0,068	1,011
	LAPORTA	0,488	0,233	4,381	1	0,036	1,629
	NCRI	-0,069	0,063	1,175	1	0,278	0,934
	Constant	-9,587	6,805	1,985	1	0,159	0

Table 54: The choice of assurance provider (Model 2), removal of EMPLOYEES - main statistical output

Model 3: The choice of assurance provider (Model 3), removing the variable EMPLOYEES

Parameter Estimates								
							95% Confidence Interval	
		Estimate	Std. Error	Wald	df	Sig.	Lower Bound	Upper Bound
Threshold	**[ASS_LIKERT = 0]**	3,137	4,472	0,492	1	0,483	-5,627	11,901
	[ASS_LIKERT = 1]	3,333	4,472	0,555	1	0,456	-5,432	12,099
	[ASS_LIKERT = 2]	3,361	4,472	0,565	1	0,452	-5,405	12,127
	[ASS_LIKERT = 3]	3,928	4,475	0,77	1	0,38	-4,843	12,698
Location	**ICB_0001**	0,64	0,784	0,666	1	0,414	-0,897	2,177
	ICB_1000	0,247	0,539	0,211	1	0,646	-0,808	1,303
	ICB_7000	0,082	0,612	0,018	1	0,894	-1,117	1,281
	ICB_8000	-0,614	0,575	1,138	1	0,286	-1,742	0,514
	TOTASSETS	0,36	0,139	6,735	1	0,009	0,088	0,632
	PROFITABILITY	1,656	2,911	0,324	1	0,569	-4,049	7,36
	LEVERAGE	-0,025	0,033	0,557	1	0,455	-0,09	0,04
	OWNERSHIP	0,517	0,805	0,412	1	0,521	-1,062	2,095
	MEDIA	0,003	0,002	3,114	1	0,078	0	0,006
	LAPORTA	0,371	0,148	6,275	1	0,012	0,081	0,661
	NCRI	-0,114	0,043	7,13	1	0,008	-0,198	-0,03

Table 55: The choice of assurance provider (Model 3), removal of EMPLOYEES - main statistical output

2. The effect of removing the variable TOTASSETS

Model 1 : The choice of assurance (Model 1), removing the variable TOTASSETS

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1a	**ICB_0001**	1,636	1,133	2,087	1	0,149	5,135
	ICB_1000	0,365	0,587	0,386	1	0,535	1,44
	ICB_7000	0,235	0,667	0,124	1	0,725	1,265
	ICB_8000	0,348	0,685	0,258	1	0,612	1,416
	PROFITABILITY	0,741	3,225	0,053	1	0,818	2,097
	LEVERAGE	-0,013	0,033	0,155	1	0,694	0,987
	OWNERSHIP	0,414	0,91	0,207	1	0,649	1,513
	MEDIA	0,002	0,002	1,375	1	0,241	1,002
	LAPORTA	0,328	0,162	4,113	1	0,043	1,388
	NCRI	-0,135	0,048	7,844	1	0,005	0,874
	EMPLOYEES	0,169	0,121	1,934	1	0,164	1,184
	Constant	5,131	3,41	2,264	1	0,132	169,235

Table 56: The choice of assurance (Model 1), removal of TOTASSETS - main statistical output

Model 2: The choice of assurance provider (Model 2), removing the variable TOTASSETS

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1a	**ICB_0001**	-0,382	0,9	0,18	1	0,672	0,683
	ICB_1000	-0,352	0,819	0,185	1	0,667	0,703
	ICB_7000	1,521	1,19	1,633	1	0,201	4,576
	ICB_8000	-1,473	1,016	2,101	1	0,147	0,229
	PROFITABILITY	0,136	5,604	0,001	1	0,981	1,145
	LEVERAGE	0,092	0,061	2,274	1	0,132	1,096
	OWNERSHIP	1,06	1,371	0,598	1	0,439	2,886
	MEDIA	0,011	0,006	3,642	1	0,056	1,011
	LAPORTA	0,478	0,23	4,322	1	0,038	1,613
	NCRI	-0,077	0,062	1,548	1	0,213	0,926
	EMPLOYEES	0,252	0,173	2,129	1	0,145	1,286
	Constant	-0,691	4,298	0,026	1	0,872	0,501

Table 57: The choice of assurance provider (Model 2), removal of TOTASSETS - main statistical output

Model 3: The choice of assurance provider (Model 3), removing the variable TOTASSETS

Parameter Estimates								
							95% Confidence Interval	
		Estimate	Std. Error	Wald	df	Sig.	Lower Bound	Upper Bound
Threshold	**[ASS_LIKERT = 0]**	-3,813	2,973	1,645	1	0,2	-9,639	2,014
	[ASS_LIKERT = 1]	-3,622	2,971	1,486	1	0,223	-9,445	2,202
	[ASS_LIKERT = 2]	-3,595	2,971	1,464	1	0,226	-9,418	2,228
	[ASS_LIKERT = 3]	-3,045	2,967	1,053	1	0,305	-8,861	2,77
Location	**ICB_0001**	0,947	0,774	1,496	1	0,221	-0,57	2,464
	ICB_1000	0,307	0,536	0,328	1	0,567	-0,744	1,357
	ICB_7000	0,571	0,607	0,884	1	0,347	-0,619	1,761
	ICB_8000	-0,068	0,613	0,012	1	0,911	-1,27	1,133
	PROFITABILITY	0,368	2,827	0,017	1	0,897	-5,174	5,909
	LEVERAGE	0,003	0,03	0,007	1	0,932	-0,057	0,062
	OWNERSHIP	0,642	0,81	0,628	1	0,428	-0,946	2,231
	MEDIA	0,003	0,002	4,428	1	0,035	0	0,006
	LAPORTA	0,375	0,146	6,566	1	0,01	0,088	0,662
	NCRI	-0,121	0,042	8,244	1	0,004	-0,203	-0,038
	EMPLOYEES	0,17	0,109	2,423	1	0,12	-0,044	0,383

Table 58: The choice of assurance provider (Model 3), removal of TOTASSETS - main statistical output

Appendix U: Robustness check with variable 'FINANCIALS' - main statistical output

1. The effect of removing the variable LEVERAGE

Model 1 : The choice of assurance (Model 1), removing the variable LEVERAGE

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1a	**ICB_0001**	1,393	1,158	1,448	1	0,229	4,027
	ICB_1000	0,367	0,588	0,388	1	0,533	1,443
	ICB_7000	-0,244	0,732	0,111	1	0,739	0,783
	ICB_8000	-0,654	0,728	0,806	1	0,369	0,52
	PROFITABILITY	1,689	3,281	0,265	1	0,607	5,415
	OWNERSHIP	0,21	0,916	0,053	1	0,818	1,234
	MEDIA	0,002	0,002	1,001	1	0,317	1,002
	LAPORTA	0,354	0,162	4,764	1	0,029	1,424
	NCRI	-0,128	0,048	7,044	1	0,008	0,88
	EMPLOYEES	-0,036	0,172	0,043	1	0,837	0,965
	TOTASSETS	0,298	0,197	2,297	1	0,13	1,347
	Constant	-0,251	4,939	0,003	1	0,96	0,778

Table 59: The choice of assurance (Model 1), removal of LEVERAGE - main statistical output

Model 2: The choice of assurance provider (Model 2), removing the variable LEVERAGE

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1a	**ICB_0001**	-0,828	0,994	0,695	1	0,405	0,437
	ICB_1000	-0,564	0,823	0,47	1	0,493	0,569
	ICB_7000	0,83	1,239	0,449	1	0,503	2,293
	ICB_8000	-1,534	0,954	2,586	1	0,108	0,216
	PROFITABILITY	2,769	5,593	0,245	1	0,621	15,944
	OWNERSHIP	0,868	1,374	0,399	1	0,528	2,383
	MEDIA	0,011	0,006	3,141	1	0,076	1,011
	LAPORTA	0,467	0,23	4,129	1	0,042	1,595
	NCRI	-0,065	0,063	1,051	1	0,305	0,937
	EMPLOYEES	0,035	0,218	0,025	1	0,873	1,035
	TOTASSETS	0,528	0,248	4,547	1	0,033	1,696
	Constant	-11,374	6,686	2,894	1	0,089	0

Table 60: The choice of assurance provider (Model 2), removal of LEVERAGE - main statistical output

Model 3: The choice of assurance provider (Model 3), removing the variable LEVERAGE

Parameter Estimates								
							95% Confidence Interval	
		Estimate	Std. Error	Wald	df	Sig.	Lower Bound	Upper Bound
Threshold	**[ASS_LIKERT = 0]**	2,48	4,497	0,304	1	0,581	-6,335	11,294
	[ASS_LIKERT = 1]	2,675	4,498	0,354	1	0,552	-6,14	11,491
	[ASS_LIKERT = 2]	2,703	4,498	0,361	1	0,548	-6,113	11,519
	[ASS_LIKERT = 3]	3,269	4,5	0,528	1	0,468	-5,551	12,088
Location	**ICB_0001**	0,594	0,802	0,55	1	0,459	-0,977	2,165
	ICB_1000	0,266	0,536	0,245	1	0,621	-0,786	1,317
	ICB_7000	0,023	0,662	0,001	1	0,972	-1,275	1,321
	ICB_8000	-0,976	0,657	2,203	1	0,138	-2,264	0,313
	PROFITABILITY	1,43	2,889	0,245	1	0,62	-4,231	7,092
	OWNERSHIP	0,45	0,818	0,302	1	0,582	-1,153	2,052
	MEDIA	0,003	0,002	3,503	1	0,061	0	0,006
	LAPORTA	0,381	0,147	6,745	1	0,009	0,094	0,669
	NCRI	-0,115	0,043	7,228	1	0,007	-0,198	-0,031
	EMPLOYEES	-0,051	0,154	0,109	1	0,741	-0,354	0,252
	TOTASSETS	0,352	0,179	3,895	1	0,048	0,002	0,702

Table 61: The choice of assurance provider (Model 3), removal of LEVERAGE - main statistical output

2. The effect of removing the variable PROFITABILITY

Model 1 : The choice of assurance (Model 1), removing the variable PROFITABILITY

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1a	**ICB_0001**	1,367	1,16	1,389	1	0,239	3,924
	ICB_1000	0,271	0,585	0,214	1	0,644	1,311
	ICB_7000	-0,287	0,735	0,153	1	0,696	0,75
	ICB_8000	-0,408	0,791	0,266	1	0,606	0,665
	OWNERSHIP	0,213	0,918	0,054	1	0,817	1,237
	MEDIA	0,001	0,002	0,841	1	0,359	1,001
	LAPORTA	0,328	0,163	4,032	1	0,045	1,388
	NCRI	-0,126	0,049	6,712	1	0,01	0,882
	EMPLOYEES	-0,027	0,171	0,024	1	0,877	0,974
	TOTASSETS	0,34	0,204	2,762	1	0,097	1,405
	LEVERAGE	-0,033	0,036	0,841	1	0,359	0,968
	Constant	-1,128	5,069	0,05	1	0,824	0,324

Table 62: The choice of assurance (Model 1), removal of PROFITABILITY - main statistical output

Model 2: The choice of assurance provider (Model 2), removing the variable PROFITABILITY

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1a	**ICB_0001**	-0,763	0,973	0,616	1	0,433	0,466
	ICB_1000	-0,504	0,816	0,381	1	0,537	0,604
	ICB_7000	0,855	1,239	0,476	1	0,49	2,352
	ICB_8000	-2,095	1,038	4,075	1	0,044	0,123
	OWNERSHIP	0,987	1,389	0,505	1	0,477	2,684
	MEDIA	0,011	0,006	3,447	1	0,063	1,011
	LAPORTA	0,476	0,23	4,289	1	0,038	1,61
	NCRI	-0,069	0,063	1,179	1	0,278	0,933
	EMPLOYEES	0,055	0,217	0,063	1	0,801	1,056
	TOTASSETS	0,413	0,252	2,695	1	0,101	1,512
	LEVERAGE	0,056	0,06	0,881	1	0,348	1,058
	Constant	-8,696	6,645	1,713	1	0,191	0

Table 63: The choice of assurance provider (Model 2), removal of PROFITABILITY - main statistical output

Model 3: The choice of assurance provider (Model 3), removing the variable PROFITABILITY

Parameter Estimates								
							95% Confidence Interval	
		Estimate	Std. Error	Wald	df	Sig.	Lower Bound	Upper Bound
Threshold	**[ASS_LIKERT = 0]**	3,011	4,648	0,419	1	0,517	-6,1	12,121
	[ASS_LIKERT = 1]	3,207	4,649	0,476	1	0,49	-5,905	12,319
	[ASS_LIKERT = 2]	3,235	4,649	0,484	1	0,487	-5,877	12,347
	[ASS_LIKERT = 3]	3,802	4,651	0,668	1	0,414	-5,315	12,918
Location	**ICB_0001**	0,563	0,803	0,492	1	0,483	-1,011	2,137
	ICB_1000	0,191	0,533	0,129	1	0,72	-0,854	1,236
	ICB_7000	0,001	0,665	0	1	0,999	-1,303	1,305
	ICB_8000	-0,831	0,712	1,365	1	0,243	-2,226	0,563
	OWNERSHIP	0,436	0,817	0,285	1	0,594	-1,165	2,037
	MEDIA	0,003	0,002	3,323	1	0,068	0	0,006
	LAPORTA	0,367	0,148	6,154	1	0,013	0,077	0,657
	NCRI	-0,113	0,043	6,98	1	0,008	-0,197	-0,029
	EMPLOYEES	-0,046	0,154	0,09	1	0,764	-0,348	0,255
	TOTASSETS	0,379	0,187	4,12	1	0,042	0,013	0,745
	LEVERAGE	-0,022	0,033	0,459	1	0,498	-0,087	0,042

Table 64: The choice of assurance provider (Model 3), removal of PROFITABILITY - main statistical output