

# Factors Influencing Voluntary Disclosure in the Annual Reports of Portuguese Foundations

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**Abstract** The aim of this paper is to examine the influence of Portuguese Foundation's characteristics on their annual report disclosure practices. Data were collected from 142 Foundations in Portugal, which represents 50.9% of the Portuguese foundational sector. Supported by a Structural Equation Model (SEM), this study evaluates cause–effect relationship between Voluntary Disclosure, Board Structure, Organizations' Characteristics and the existence of Auditing. Findings reveal that Organizations' Characteristics influence the forms of Auditing, and on its turn, Auditing has a positive indirect impact on Voluntary Disclosure. Contrary to expectations, Board Structure does not affect Voluntary Disclosure. This paper fills a void in the literature by examining the impact of Foundations' characteristics on their voluntary disclosure of financial and non-financial information.

**Résumé** Le présent article a pour but d'étudier l'influence des caractéristiques des fondations portugaises sur leurs pratiques de déclaration de rapport annuel. Des données ont été recueillies auprès de 142 fondations du Portugal, lesquelles représentent 50,9 % du secteur national. Appuyée par un modèle d'équation structurelle, la présente étude évalue la relation de cause à effet entre les déclarations

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volontaires, la structure des conseils d'administration, les caractéristiques des organismes et l'existence de processus d'audit. Les résultats démontrent que les caractéristiques des organismes influencent les formes d'audit en vigueur et que les processus d'audit ont à leur tour un impact positif indirect sur les déclarations volontaires. Contrairement aux attentes, la structure des conseils d'administration n'a pas d'incidence sur lesdites déclarations. Le présent article comble une brèche dans la documentation existante en étudiant l'impact des caractéristiques des fondations sur la déclaration volontaire de leurs renseignements financiers et non financiers.

**Zusammenfassung** Ziel dieses Beitrags ist es zu untersuchen, wie sich die Merkmale portugiesischer Stiftungen auf ihre Praxis zur Offenlegung ihrer Jahresberichte auswirken. Es wurden Daten von 142 Stiftungen in Portugal erfasst, was einem Anteil von 50,9% des portugiesischen Stiftungssektors entspricht. Beruhend auf einem Strukturgleichungsmodell bewertet diese Studie die Ursache-Wirkungs-Beziehung zwischen der freiwilligen Offenlegung, der Vorstandsstruktur, den Merkmalen der Organisation und der Durchführung von Wirtschaftsprüfungen. Die Ergebnisse zeigen, dass die Merkmale der Organisationen die Form der Wirtschaftsprüfungen beeinflussen und sich die Wirtschaftsprüfungen wiederum indirekt positiv auf die freiwillige Offenlegung auswirken. Entgegen den Erwartungen steht die Vorstandsstruktur in keinem Verhältnis zur freiwilligen Offenlegung. Dieser Beitrag schließt eine Lücke in der Literatur, indem er untersucht, wie sich die Merkmale von Stiftungen auf die freiwillige Offenlegung ihrer finanziellen und nichtfinanziellen Informationen auswirken.

**Resumen** El objetivo del presente documento es examinar la influencia de las características de la Fundación portuguesa sobre sus prácticas de divulgación del informe anual. Los datos fueron recopilados de 142 Fundaciones en Portugal, que representan el 50,9 % del sector fundacional portugués. Apoyadas por un Modelo de Ecuación Estructural (SEM, por sus siglas en inglés), el presente estudio evalúa la relación causa-efecto entre la Divulgación Voluntaria, la Estructura del Consejo, las Características de las Organizaciones y la existencia de Auditorías. Los hallazgos revelan que las Características de las Organizaciones influyen en las formas de Auditoría y, a su vez, la Auditoría tiene un impacto positivo indirecto sobre la Divulgación Voluntaria. Al contrario de lo que se esperaba, la estructura del Consejo no afecta a la Divulgación Voluntaria. El presente documento llena un vacío en el material publicado mediante el examen del impacto de las características de las Fundaciones en su divulgación voluntaria de información financiera y no financiera.

**Keywords** Foundations · Stakeholder-Agency Theory · Structural Equation Model · Voluntary Disclosure

## Introduction

Nonprofit organizations (NPOs) frequently follow the major business practices (Eisenberg 1997) and often implement some of the best governance practices of the profit sector (Brown 2002). Governance models of NPOs have an important role in

determining information disclosure practices. They are central to the accountability process, as different board compositions may lead to different approaches to what information should be disclosed (Olson 2000; Callen et al. 2003; Boesso and Kumar 2007; Zimmermann and Stevens 2008). Governance models are applied in the NPOs sector taking into consideration the distinctive features and characteristics of these organizations: they undertake a nonprofit and philanthropic mission (Ben-Ner and Van Hooissen 1991; Carver 1997; Speckbacher 2008).

Nonprofit organizations voluntary disclosure assumes a vital role in the transparency process, being a fundamental condition for maintaining public trust in the sector (Lee 2004; Gray et al. 2006; Fremont-Smith 2007; Benjamin 2008b), by reinforcing its legitimacy and credibility (Smith 1988; Lee 2004). This disclosure process needs to be made more transparent. It should deliver more useful information about management processes (Krashinsky 1997; Torres and Pina 2003).

This paper examines the influence of Portuguese Foundations' characteristics on their voluntary disclosure process. We selected the Foundations that are part of the Portuguese third sector because they are considered as having the strictest external supervision and governance (Andrés-Alonso et al. 2009). Our study contributes to the literature in two different ways. First, it provides the first comprehensive study of the extent of voluntary disclosure by Portuguese Foundations. Second, it helps to understand the most important indicators (financial and non-financial) disclosed voluntarily by these entities. Based on a survey by questionnaire, we analyze the voluntary information disclosed by Portuguese Foundations in their annual reports in the first year of the mandatory application of the new accounting standards for the third sector (SNC-ESNL<sup>1</sup>) and the Foundations' characteristics (such board characteristics; auditing process; and organizational characteristics) which can influence the Voluntary Disclosure.

Based on prior literature, we take into consideration the following four constructs: **Organizations' Characteristics**, explained by the Foundation size, public funding, staff members and projects; **Auditing**, explained by mandatory auditing, auditing opinion and voluntary auditing; **Board Structure**, explained by inside members, the remuneration of board and the remuneration of CEO<sup>2</sup>; and **Voluntary Disclosure**, explained by 7 indexes in accordance with 31 indicators on SORP 2005—Statement of Recommended Practices used in the UK as indicators on nonprofit sector report. We have chosen these indicators as basis to our evaluation of Foundations' voluntary disclosure because they are already being used in the British Charities accountability, are considered the best practice in terms of information to include in the annual report (Connolly and Hyndman 2004; Hyndman and McMahon 2010) and can be taken as a reference in the Portuguese NPOs setting.

Based on stakeholder-agency theory, we propose a set of hypotheses related to the direct and indirect relationship between Voluntary Disclosure and Foundations' characteristics. These hypotheses are tested using a Structural Equation Model

<sup>1</sup> Decree-Law n°. 36-A/2011 of 9 March - Accounting Standards System of Nonprofit Organizations (SNC - ESNL).

<sup>2</sup> Chief Executive Office.

(SEM). The results show that some variables, namely public funding, size, staff members, projects and auditing, have a significantly moderating role as well as a positive effect on the disclosure process, while others do not have any significant influence on the information disclosed. Our research represents a step toward understanding the factors that influence the disclosure process of Portuguese Foundations, in particularly voluntary disclosure. It also contributes to the analysis of the transparency and legitimacy of the Portuguese nonprofit sector. Therefore, this research can be seen as both a practical and empirical contribution to the foundational sector in Portugal and in other countries that may have a similar NPOs context.

The paper is organized as follows. The next section offers the background to the topic addressed in this study. Section 3 presents the research hypotheses and theoretical model. Section 4 describes the research design, and Sect. 5 presents the empirical results. Finally, in Sect. 6 results are discussed and some concluding remarks are offered.

## Background

Despite the growing importance of accountability in NPOs, these entities show some reluctance in disclosing accounting information. There are contentions that financial statements used in the sector do not offer a true and fair view of the organizations (Jegers 2009; Helmig et al. 2004). Nevertheless, financial reports are seen as an important tool for public members to make decisions such as those concerning donating or contracting services or doing voluntary work (Parsons 2007). In the NPOs sector, the accountability process should be seen as a responsibility filter (Fry 1995; Benjamin 2008a) in the execution of actions, such as project execution and in the subsequent explanation given to stakeholders (Ebrahim 2003a, b); Gray et al. 2006). Rutherford (2005) suggests that organizations use the annual report as a strategic tool for communicating with stakeholders. Stakeholders' needs are the most commonly used factor to legitimate nonprofit financial reporting (Meyer et al. 2013).

The process of accountability is usually seen as a way of improving the connection between third sector organizations and their stakeholders (Gross Jr Gross 1975, 1997; Milofsky and Blades 1991; Bogart 1995; Chisolm 1995; Gates and Hill 1995; Hammack 1995; Lawry 1995; Young et al. 1996; Greenlee 1998). Both profit and nonprofit organizations have some difficulties regarding disclosing some information in view of the trade-off between the costs and benefits of doing so (Edwards and Smith 1996). However, the accountability of the latter type of organizations should be far more complex and complete. The transparency effort should be related not only to financial records integrity but also to voluntary information, because of their social and philanthropic action and use of public grants (Fry 1995). Accountability is also seen as a portrait of the efficacy and of the results (Lee 2004; Benjamin 2008a), or as an obligation of transparency, goal definition and verification, as well as the assumption of responsibilities before the community (Hammack 1995). Many studies state that public disclosure is also a

sign that the organization works on behalf of public and not private interests, and therefore it is a way of maintaining public trust (Gray et al. 2006; Fremont-Smith 2007; Carvalho and Blanco 2007; Benjamin 2008b).

Transparency regarding an organization's structure implies the disclosure of multilevel information, pertaining to issues such as teamwork, volunteer performance and individual relationships between people involved, particularly members and CEOs (Friedman and Phillips 2004; Saidel and Harlan 1998). Some studies (Nobbie and Brudney 2003; Saidel and Harlan 1998) mention that the greater involvement of these organizations in the society has generated changes in their governance structure and funders. This was necessary to define higher standards of responsibility and performance, since they face competition for limited resources and operate in growing politicized environments.

The present study aims to analyze factors that have direct or indirect influence on the voluntary disclosure in Portuguese Foundations. To measure the Voluntary Disclosure, we take as reference the Statement of Recommended Practice (SORP) indicators used in the UK (Charity Commission 2005). This is described by Hyndman and McMahon (2010) as the major step up regarding accounting and reporting recommendations (or requirements) for charities. It is also important to mention that in these recommendations stakeholders are referred to as groups or individuals who impact, or are impacted upon by a sector's reporting regime (Hyndman and McMahon 2010). Social pressure deriving from some scandals, donors' need for information, authorities' pressure and other parties' supervision, all have a positive influence on the accountability and transparency attitude (Ebrahim 2016).

Foundations are a fairly recent phenomenon in Portugal (around one century old) and one of the most institutionalized organizations, with specific characteristics (Carvalho 2010). Portuguese Foundation Law<sup>3</sup> distinguishes between public and private Foundations. Public Foundations result from public sector initiative, are created using legislative rules, receive public funds and are granted with public interest objectives. Private Foundations are created by personal initiative, have different collective objectives (cultural, social, scientific, educational, recreational or social solidarity) and use private funds. Anheier et al. (1997) divide NPOs into two groups: organizations which depend on public funds and organizations whose revenue comes predominantly from the private sector. The authors state that organizations from the first group are more bureaucratic and subject to political pressure.

In accordance with Portuguese Foundations Law,<sup>4</sup> Foundations' governance bodies must have a management collegial body, with a total odd number (executive board). For each Foundations' bodies, several denominations are possible: a Board of Founders; Board of Trustees or General Council; a Board of Directors or Executive Commission; and a Board of Auditors or Audit Committee. The bodies' members are designated by the main founder, and the foundations' charter regulates their competences, as well as the organization and functioning of the different

<sup>3</sup> Law n.º 24/2012, of 9 July.

<sup>4</sup> Law n.º 24/2012, of 9 July, article 26º and 27º.

bodies. In all foundations, there are boards with executive functions and others with monitoring functions. There are no legal restrictions regarding the number of inside and outside members in the different boards. The founder allocates the assets to the founding entity, and the supervisory body is responsible for management, supervision and auditing. Private foundations that receive public financial support must have state supervision and control<sup>5</sup> and those that are required by law must have external auditing.<sup>6</sup> Non-compliance of the transparency subject (article 9° of Foundation Law) will force the state to reverse the financial support allocated or repeal the tax benefit status.

## Theoretical Model and Research Hypotheses

### Theory

The traditional agency theory perspective focuses on the separation of ownership and management and the existence of information asymmetries (Jensen and Meckling 1976; Fama and Jensen 1983). These features generate the possibility of opportunistic behavior by the agent (the manager) who may have different objectives from those of the principal (the owner), and thus pursue their own interests (the agency problem) (Prior et al. 2008).

Even in a for-profit setting, agency theory reveals some problems. Cornell and Shapiro (1987) emphasize that the corporations' claimants go beyond investors and include customers, suppliers, providers of complementary services and products, distributors and employees. These non-investor stakeholders provide an often overlooked connection between corporate strategy and corporate well-being. Cornell and Shapiro distinguish between explicit and implicit claims that corporations issue to these non-investor stakeholders. Whereas the former are contractual in nature (e.g., wage contracts and product warranties), the latter include promises that a corporation makes but are often too vague to put into writing (e.g., promises of continuing supply, timely delivery, product enhancement, job security). Explicit claims are risk-free unless financial distress occurs, while implicit claims are risky even if financial distress is not a problem. For these authors, "if only explicit claims are considered, then stakeholders will not play an important role in the financial policy of most firms because their explicit claims are generally senior to those of stockholders and bondholders" (Cornell and Shapiro 1987, p. 6).

Although not labeling it as such, Cornell and Shapiro's view is consistent with a theoretical frame that has been called stakeholder-agency theory (Hill and Jones 1992) or generalized agency theory (Prior et al. 2008). According to this lens of analysis, a corporation is considered as a "multilateral set of relationships amongst stakeholders," rather than merely a "bilateral relationship between shareholders and managers" (Prior et al. 2008, p. 162). Besides shareholders, other stakeholder

<sup>5</sup> The Portuguese Foundation Law establishes that auditing is compulsory in the case of foundations with incomes exceeding 2 million euros.

<sup>6</sup> Law n°24/2012 of 9 July, article 9°; 41°; 44°; 47°; 55°.

groups are seen as exercising influence on managers' crucial decisions. Some stakeholders provide crucial resources to the corporation and possess the power to continue such provision or stop it, thus exerting influence on the decisions of managers. These stakeholders "supply the firm with resources on the implicit (tacit) understanding that their claims on the organizations will be recognized" (Hill and Jones 1992, p. 140). Such claims include those pertaining to return on investment (by shareholders), higher wages (by the corporation's workforce), products of higher quality and/or lower price (from consumers), or higher prices and/or stabler ordering patterns (from suppliers).

Although some studies on NPOs (Alexander and Weiner 1998; Callen et al. 2003) are focused almost exclusively on internal agency problems, stakeholder relationships can also be modeled as principal–agent relationships. NPOs are accountable to both internal and external stakeholders, such as their staff, trustees or donors and clients. According to Jegers (2009), in NPOs there are no owners in the sense of shareholders, rather there are organizational stakeholders who have a stake in the organization and are affected by the organization's activities. Since all stakeholders have different goals, an agency perspective applied to NPOs needs multiple principals (Jegers 2009; Balser and McClusky 2005). Steinberg (2010) applies agency theory to NPOs and argues that the existence of multiple principals, with different objectives, hinders the potential of agency theory to resolve some issues such as disclosure.

Stakeholder-agency theory recognizes the interests of all stakeholders and contributes to understand how management can satisfy the competing interests of stakeholders. It can be used to explain the dynamic relationship between stakeholders and management, and we consider it adequate to the analysis of the third sector. It allows to assume that all groups of stakeholders have the same importance in the accountability process. Accountability mechanisms can be an important means of control that stakeholders use to direct the actions of management (Hill and Jones 1992).

To have an effective governance, the board must understand stakeholders' needs, since one of the cornerstones of the organization's success is to understand their particular stakeholders. This implies having the necessary mechanisms that make possible their participation in management bodies and to enhance the diversity of opinions in management (Brown 2002; Gill et al. 2005). Freeman (1984) defines stakeholders as any group or individual who can affect and be affected by the organization objectives or groups which have legitimate right over the organization. The institutions and individuals who finance the work of NPOs, such as the government, private entities and citizens who donate goods and financial resources are the main groups of the stakeholders in these entities (LeRoux 2009). In view of the importance of founders, donors and the government for the creation, governance, funding and functioning of foundations, it is almost impossible to depict one of these stakeholders as more important than the others. The government has to be acknowledged as a prominent stakeholder of foundations, given its importance in the creation, funding and regulation of these organizations.

Regardless of their property structure, the majority of the organizations face agency problems. In the NPOs scenario, the control and the property are separated.



Agency problems arise whenever the personal objectives of managers do not coincide with those of the organizations and remaining direct stakeholders.

The agency problems arise not only due to differences in motivation and objectives of principal and agent, but also to the asymmetry of information and risk appetite from different actors (Jensen and Meckling 1976). In the third sector, the absence of evaluation parameters may lead to the use of less objective criteria, mostly linked to institutional factors, such as the public image of their leaders or the relationship between managers and funders/donors (Bradley et al. 2003). As a result, the leaders of these organizations can be under financial and social pressures. With the objective of making their institutions economically viable, managers can compromise their missions inadvertently (Young 2002).

Agency theory anticipates that higher agency costs will induce higher disclosure levels (Jensen and Meckling 1976; Chow 1982; Watts and Zimmerman 1978). Voluntary disclosure can have a powerful role in the reduction of information asymmetries (Zhuang et al. 2011). In NPOs, there are information asymmetries between managers (agent) and private or public donors (principal) and conflict of interests related to power delegation (agency conflict) (Bradley et al. 2003). There are reasons to believe that the agent will not always act accordingly to the interests of the principal and that the principal may limit these disputes by establishing adequate incentives to the agent (Jensen and Meckling 1976). In the particular case of Foundations, the agency problems enhance the need for accountability because managers choose the recipient of the Foundation's resources (Rey and Martin 2011). Disclosure will reduce the agency problems and information asymmetries.

Thorne et al. (2014) present evidence that larger organizations have more political visibility and are subject to greater external scrutiny than smaller organizations and suggest that they disclose standalone reports in response to external scrutiny by stakeholders, which is consistent with a stakeholder-agency perspective.

## Model Constructs

### *Organization's Characteristics*

The constructs of the model were operationalized according to the literature review. The Organization's Characteristics construct represents organization's characteristics that can be used as distinguishing features (Stone et al. 1999; Iecovich 2005). Different characteristics are related to: total assets (Ho and Shun Wong 2001; Gordon et al. 2002; Behn et al. 2010); paid or voluntary members (Bradshaw et al. 1992) who work for the Foundation. Salamon et al. (2012) measured the size of the nonprofit sector by the paid full-time equivalent (with or without volunteers). Matsunaga et al. (2010) state that the number of paid members is an important organizational characteristic. NPOs are, also, strongly dependent on public funds (from the government), private donations and other fundraising typologies (SFAS n° 116; Ruppel 2002; SFAS n° 136; Chisolm 1995).



In this study, the construct Organization's characteristics is operationalized as total assets, work members (paid and volunteer), public funds received and the number of projects developed by Foundations.

### *Auditing*

The Auditing construct represents not only the audit performed by legal imperative or statutory reasons, but also auditing activities that are performed at the request of the governing bodies that consider them an important accountability tool and also voluntary auditing (Vermeer et al. 2006; Pridgen and Wang 2012; Reheul et al. 2014). Financing entities have the legitimacy to demand internal and external auditing (Reheul et al. 2014). According to Keating and Frumkin (2003), audits are an important way of making NPOs accountable before donors, board of trustees and financing entities, to assure that resources are spent according to the donors' and financiers' intentions. The organizations that use auditing techniques disclose higher quality information and are more transparent to donors, founders and governmental entities (Pridgen and Wang 2012). Babío Arcay and Muiño Vazquez (2005) observed that audit committees help to reduce the likelihood of accounting fraud.

### *Voluntary Disclosure*

Studies on voluntary disclosure in the nonprofit sector (Parsons 2007; Atan et al. 2010; Saxton et al. 2012; TremblayBoire and Prakash 2015) constructed indexes using the annual reports. Our construct for Voluntary Disclosure is based on a set of indicators that are part of the SORP (2005). The information is gathered by means of a questionnaire organized with questions prepared to confirm or not the disclosure of the indicator in the Foundation annual report.

### *Board Structure*

The Board Structure construct refers to the number of inside members and is supported by models proposed in the literature (Cornforth and Simpson 2002; Prybil 2006; Saxton et al. 2012). There is not just one model of board governance in NPOs (Robinson 2001; Stone and Ostrower 2007). Alexander et al. (1998) proposed a model for nonprofit boards (large board size; wide range of perspectives/backgrounds; small number of inside directors; separation of management and governance; informal management; accountability to board; no limit to consecutive terms for board members; no compensation for board service; and emphasis on asset and mission preservation).

According to the Portuguese Foundation law,<sup>7</sup> those who have a position on a board of public Foundations cannot receive any kind of payment or compensation for their services if they cumulate that position with another in other Foundation. However, a considerable number of Foundations have a compensation or remuneration system for board members because they do not cumulate positions

<sup>7</sup> Law n°.24/2012 of 9 July – The Portuguese Foundations Law.

in different Foundations' boards. The construct Board Structure is operationalized as the proportion of inside members on the board, the proportion of remunerated members on the board and whether the CEO is remunerated or not.

As outlined below, we expect Organizations' Characteristics to have a direct effect on Auditing and Auditing to be positively related to Voluntary Disclosure. It is also expected that Organizations' Characteristics have a direct effect on the Board Structure and, on the other hand, the Board Structure have a direct effect on Voluntary Disclosure. Therefore, we suggest an indirect effect of Organizations' Characteristics on Voluntary Disclosure.

## Model and Hypotheses

Figure 1 shows the Hypothesized Path Model of causal relationships between the constructs and the hypothesized relations among the different proxies. Accordingly, the hypotheses are formulated as follows:

**H1** Organizations' characteristics are positively related to auditing

Based on stakeholder-agency theory, we hypothesize that *larger organizations* with a larger number of stakeholders and state funds have stronger agency costs. Larger organizations have more stakeholders and are subjected to increased levels of stakeholder scrutiny. Those with more sources of funding are more likely to have a variety of activities and, therefore, to report an internal auditing (Behn et al. 2010; Petrovits et al. 2011). Vermeer et al. (2006) suggest that larger NPOs are more likely to have auditing performed by external auditors since they are more complex

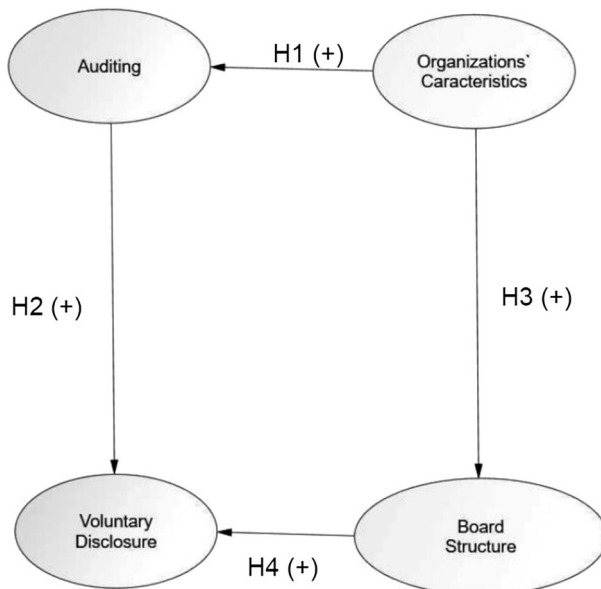


Fig. 1 Hypothesized Path Model

and hence can have increased demand for monitoring from the funders and the government. The authors additionally concluded that larger NPOs are also more likely to be scrutinized by the public and the media. Given the adverse publicity generated by some recent scandals, these organizations may be more likely to adopt stronger governance and monitoring mechanisms. The size of an organization influences the level of information compliance, larger NPOs are more likely to have an audit committee, a code of conduct, whistle-blower protection and management certification of financial reports; therefore, auditors have a crucial role in the monitoring process (Iyer and Watkins 2008). Keating and Frumkin (2003), Parsons (2007) and Weisbrod and Dominguez (1986) consider that the existence of an independent auditor gives donors the assurance that the organization's financial statements are reliable. However, the quality of audits and subsequent ability to reduce agency costs differ significantly from one organization to another (DeAngelo 1981).

The literature also reveals that some characteristics of the organizations (such as size, age, funding) influence their disclosure process (Meek et al. 1995; Dye 2001; Healy and Palepu 2001; Boesso and Kumar 2007). Hence, we also expect to find an *indirect influence* of Organizations' Characteristics on Voluntary Disclosure. Additionally, the members of the organization are an influential factor on disclosure, because different numbers of participants can improve the number of activities and this will imply different levels of reporting (Christensen and Ebrahim 2006).

State subsidies or grants received (Wagenhofer 1990; Wallace et al. 1994; Lee 2004; Holtfreter 2008; Kaplan et al. 2009) are also determinant factors in the disclosure process. In the case of NPOs, Behn et al. (2010) and Gordon et al. (2002) found a positive relationship between organizational size and voluntary disclosure and those who obtain more revenues from donations will tend to be more open to voluntary financial disclosure (Behn et al. 2010).

## H2 Auditing is positively related to the voluntary disclosure

Based on stakeholder-agency theory, we expect a positive relationship between Auditing and the Voluntary Disclosure. Parsons (2007) suggests that accounting information can directly impact an individual's decision to make a charitable contribution. The information that is disclosed by organizations is determinant for the decision making of how and what the stakeholders intend to donate. Thus, to increase donations, NPOs must guarantee the disclosure of the auditing opinion, provide appropriate financial information so as to assure the legitimacy and reputation of the organization and, at the same time, guarantee that donations are properly used. The increasing calls for transparency in the nonprofit sector indicate that donors need information that provides assurance regarding the reputation of NPOs. As a result, these organizations should adopt the best financial practices and be prepared to disclose in detail their way of operating. If donors find the information provided reliable and trustworthy, this may increase their will to contribute (Zhuang et al. 2011). Audited financial information, as well as the reports about the audited funds are frequently disclosed by third sector organizations (Connolly and Hyndman 2004). On the other hand, Alanezi and Albuloushi (2011)

report the existence of a correlation between voluntary auditing and financial disclosure reports. This is supported by the “stakeholder-agency theory.”

An external auditor can reduce the information asymmetry between the organization and its resource providers regarding the good use of the resources (agency), thereby offering the necessary information to secure the flow of resources toward the organization (Verbruggen and Christiaens 2012).

Gordon et al. (2002) suggest that highly visible institutions audited by the state disclose more information than their counterparts. Empirical evidence indicates that Auditing is positively related to Voluntary Disclosure (Ho and Shun Wong 2001). Audited financial information is most frequently disclosed by charities. Information such as audited funds flow statements is very important complementary information (Connolly and Hyndman 2004). Alanezi and Albuloushi (2011) suggest that voluntary auditing is associated with financial reporting disclosure, while Persons (2009) corroborated the idea that organizations offering higher levels of voluntary disclosure are more likely to have more developed auditing practices and less likely to engage in fraudulent financial reporting. We suggest NPOs perform detailed auditing to be more transparent and to improve their status. Auditing reduces agency costs by disclosing information to all stakeholders, thus improving the NPOs relations with their stakeholders.

### **H3** Organizational’ characteristics are positively related to the board structure

The Organizations’ Characteristics can be in many ways related to the Board Structure. Internal characteristics of organizations, such as the foundation size, number of volunteers and number of paid staff may significantly impact the structure and functions that are performed by their boards (Bradshaw et al. 1992; Iecovich 2005). In general, Organizations’ Characteristics are of the greatest importance for understanding Board Structure. The size of NPOs is significantly correlated with board’s primary roles and actuations (Hevesi and Millstein 2001). As these organizations increase in size, they have more financial and human resources and are more prone to having more transactions and to quantify them and also be more pressured by the stakeholders who demand more information (Ben-Ner and Van Hoomissen 1992; Christensen and Ebrahim 2006; Atan et al. 2010) in accordance with “stakeholder-agency theory.”

Organizations more dependent on donations than public funds tend to have different structures of directors with different numbers of inside or remunerated members (Bradshaw et al. 1992). Larger boards are more common in organizations whose funding is more dependent on private donations than on public contributions. In NPOs, the board’s main goal is to protect the interests of the main stakeholders (founders, donors, beneficiaries and society), as well as, at the same time, manage all assets and resources to accomplish the mission. The Board Structure in NPOs has been analyzed in numerous studies (Taylor et al. 1991; Bradshaw et al. 1992; Fletcher 1992; Wood 1992; Kearns 1995; Brudney and Nobbie 2002; Cornforth 2002; Cornforth and Simpson 2002; Callen et al. 2003; Babío Arcay and Muiño Vázquez 2005; Prybil 2006; Andrés-Alonso et al. 2009; Brickley et al. 2010). The size of the organization may be the most important factor affecting choices of organizational structure, such as Board Structure (Cornforth and Simpson 2002).

Other studies analyze the financial position of the members, such as the possible existence of remuneration or some compensation of the board members and of the CEO (Brickley et al. 2010; Cardinaels 2009; Eng and Mak 2003; Fernandes 2008; Laksmana 2008). Some studies also suggest that state contributions are associated with visible changes in the Organization's Characteristics and Board Structure, such as size or board composition (Chaves et al. 2004; Froelich 1999; Gronbjerg 1993). These organizations have diverse board compositions, and their members have different roles (Callen et al. 2003). They have to guarantee the adequacy of the number of members for each particularly organization (Stone et al. 1999; Cornforth and Simpson 2002; Gill et al. 2005), having in mind that the existence of inside or outside members and of remunerated members on the board seem to have a potential effect on governance effectiveness (Jegers 2009; Yermack 1996).

Empirical evidence indicates that larger NPOs may possess a greater disposition and capacity than smaller ones to restructure governance along corporate lines (Alexander and Weiner 1998). The framework developed by Pfeffer (1973) shows that nonprofits' boards are characterized by a large number of members, more than in the profit sector, and the nature of their activity is voluntary. Bradshaw et al. (1992) found an association between the size of an organization and structural and functional aspects of boards. Iecovich (2005) found that organizational characteristics were of the greatest importance for understanding board characteristics. This author found organizations' Characteristics (such as age, membership, size or staff) to be significant and positively correlated with Board Structure (e.g., members) and functional characteristics (e.g., financial issues). Inside directors are more likely to voluntarily disclose more information to signal to the community that they are not engaged in suboptimal decision for all stakeholders (Healy and Palepu 2001). Fama and Jensen (1983) state that the independence of the board is linked with a greater monitoring objectivity but, at the same time, the presence of insiders, when possible, gives access to internal information about the organizations that can be vital for a correct monitoring and management (Adams and Ferreira 2007). As charities age they tend to become more professional in the recruitment of trustees (Cornforth and Simpson 2002) and to include more insiders in the board.

The main concern of the board of directors is to guarantee that the mission is accomplished and the interests of stakeholders addressed, using the accountability process and particularly the voluntary disclosure to improve the way how agents account for their actions to stakeholders and constrain the self-interested behavior.

#### **H4** Board structure is positively related to the voluntary disclosure

Stakeholder-agency theory contributes to the identification of the members that may influence disclosure, such as board members, internally, and donors and auditors, externally. This theory also supports the idea that larger boards that include more stakeholders' representatives disclose more to attend the needs of these stakeholders. The extent to which managers disclose more corporate information is likely to be affected by the composition and quality of the board of directors (Gul and Leung 2004). Some empirical studies reveal a significant positive association between board characteristics and disclosure (e.g., Chen and Jaggi 2000; Callen et al. 2003). Many studies analyze the existence of an inside director as the main

variable explaining the extent of disclosure in the NPOs and its relation with the Board Structure (Babío Arcay and Muiño Vázquez 2005; Saxton et al. 2012). Saxton et al. (2012) claim that the representation of outsiders in the board will be negatively related to Voluntary Disclosure. Inside directors have incentives to voluntarily disclose information because they are bonded to the organization through their remuneration incentives and their wish to protect their jobs and reputation (Lim et al. 2007).

Laksmana (2008) posits that boards are more likely to make objective decisions by supporting greater disclosure the more independent they are and in the presence of compensation. This author also demonstrates that the independence of the board is associated with the quality of the financial reporting process. Saxton and Guo (2011) reveal that the board of trustees' structure, namely the members' remuneration and the number of inside members, is positively and significantly related to disclosure.

Members of the board have concerns and demand greater disclosure in order to clarify executive compensation practices mechanisms to stakeholders (Laksmana 2008). They are under stakeholder pressure to disclose more because they know better the practices of their organizations and want to justify their functions. Yermack (1996) finds that smaller boards are more likely to provide CEOs with stronger compensation incentives, while being more ready to dismiss them for poor performance than larger boards. If the main objective is to improve compensation transparency, directors, to value their reputation and internal position, are more likely to provide higher levels of disclosure.

## Research Design

### Data and Sample Selection

The sample comprises the Portuguese Foundations in activity in 2012 (the year that the new accounting standards for the third sector became mandatory—SNC-ESNL<sup>8</sup>). Data on boards and organizations' characteristics were available for a total of 279 organizations. The sample was obtained from the list of the government's record (Censos<sup>9</sup>) and the Portuguese Foundation Centre.<sup>10</sup> A mail survey procedure via a questionnaire was used for data collection. All the 279 organizations were contacted by email and phone. We received 142 complete answers of the total active Foundations in Portugal. It represents 50.9% of the Foundation Sector. The Portuguese Foundations in this study develop the following activities (they have more than one activity): Social, 82.4%; Cultural, 52.1%; Education, 73.2%; Health, 35.9%; Environment, 21.8%; Religion, 4.2%; and Sports and Leisure, 19.7%. They

<sup>8</sup> Decree-Law n.º. 36-A/2011 of 9 March - Accounting Standards System of Nonprofit Organizations (SNC - ESNL). This accounting standardization system requires the disclosure of accounting information. In this paper we only deal with voluntary accounting information.

<sup>9</sup> Portuguese Law n.º 1/2012, de 3 de January.

<sup>10</sup> National Association of Portuguese Foundation.

have primary and secondary activities, but the most relevant area is social welfare (charitable activities serving the common good of both young and older communities). This is the most relevant area for the budget plan.

CSES (2013) points out that in 2010 more than half of the Foundations had social action as their goal (59.2%). This activity and culture, sport and recreation activities (19.4%) represented the most relevant areas. Teaching and research (11.4%) and activities in health and welfare (3.9%) followed, while development, housing and environment (0.9%) had a residual representation. Foundations have several activity areas, being the social, cultural and educational the most important ones.

The latest study on the Portuguese third sector (Salamon et al. 2012) indicated a dependence on subsidies of 40% of total expenses and that NPOs employed nearly 185 000 workers in 2002. The magnitude of the sector has created the need for a legal framework. In 2013, the *Lei de Bases da Economia Social* (Law on Social Economy<sup>11</sup>) was issued, allowing the analysis of the growth of the social economy sector over the last years. As a result, in comparative terms, the social economy was responsible in 2010 for 231 834 paid jobs, a number which reveals a steady and positive growth.

## Variables, Descriptive Statistics and Methodology

The four constructs were operationalized on the basis of previous literature. Table 1 presents the constructs, the corresponding scales and measures and the observed variables that had effect on the constructs. We use measures based on scales already developed in the literature, while making adjustments so that they could be applied to the Portuguese setting.

Studies on NPOs usually measure size by the total assets (Ho and Shun Wong 2001; Gordon et al. 2002; Behn et al. 2010), the natural log of total revenues (Saxton et al. 2012) or income (Cornforth and Simpson 2002; Andrés-Alonso et al. 2009). We used total assets because in Portuguese Foundations the revenues may not be a good proxy for size, given that despite having small revenues they can undertake relevant projects. Larger organizations with larger boards are more common in older organizations with a large paid staff and volunteers (Bradshaw et al. 1992).

Our descriptive statistic research demonstrates that only 15% of Portuguese Foundations have remunerated members (13.4% of board members). The research also shows that larger Foundations have larger boards. This is in accordance with Bradshaw et al. (1992). 54.9% of Foundations have more than 5 members on the board.

The partial indexes used in this study are based on a dichotomous measure where an item scores one if it is disclosed and zero otherwise. There are seven partial indexes, considering a total of 31 Indicators of the Statement of Recommended Practice (SORP 2005) for charity accounting (Charity Commission 2005): administrative details of trustees and advisers; structure and governance; objectives and activities; achievements and performance; financial review; plans for future

<sup>11</sup> Portuguese Legal framework for social economics.



**Table 1** Descriptive statistics

Constructs latent variables	Observed variable	Question	Measure	Min	Max	Mean	Std. deviation	Skewness	Kurtosis
Organizations' characteristics	Size	Total of assets—range from 0 to 40,000,000€	Scale 1 to 5	1	5	3.11	1.11	-0.23	-0.67
	PubFund	Public funds received by State—range from 0 to 10,000,000€ or more	Scale 1 to 5	1	5	2.40	1.20	0.19	-1.24
	Staff Members	Number of paid staff (inside/outside employees) and volunteers	Number	0	1022	90.63	146.80	3.21	13.22
Board structure	N_Projects	Number of projects developed by year—range from 0 to 16 or more	Scale 1 to 5	1	5	2.94	1.73	0.12	-1.74
	InsideB	Proportion of inside members on the board	0 to 100%	0	1	0.16	0.27	2.02	2.93
	RemunB	Proportion of remunerated members on the board	1 to 100%	0	1	0.15	0.30	1.69	2.09
Voluntary disclosure <sup>a</sup>	RemunCEO	If CEO has remuneration	Yes/no	0	1	0.33	0.47	0.73	-1.49
	Index1	3 indicators of administrative details of trustees and advisers	Proportion of individual disclosure score on categories to the maximum possible score in those categories	0	1	0.54	0.31	-0.18	-0.84
	Index2	4 indicators of structure and governance		0	1	0.44	0.26	0.16	-0.09
	Index3	8 indicators of objectives and activities		0	1	0.56	0.26	-0.12	-0.73
	Index4	9 indicators of achievements and performance		0	1	0.38	0.27	0.42	-0.49
	Index5	4 indicators of financial review		0	1	0.40	0.35	0.31	-1.22
Index6	1 indicator of plans for future periods		0	1	0.56	0.50	-0.26	-1.96	

Table 1 continued

Constructs latent variables	Observed variable	Question	Measure	Min	Max	Mean	Std. deviation	Skewness	Kurtosis
	Index7	2 indicators of funds held on behalf of others		0	1	0.22	0.38	1.36	0.11
Auditing	AOpinion	If the Audit opinion is mandatory by legal rules or by statutory rules	Yes/no	0	1	0.36	0.48	0.59	-1.67
	MAudit	If the external audit is mandatory by legal rules or by statutory rules	Yes/no	0	1	0.37	0.48	0.56	-1.71
	VAudit	If the auditing process is voluntary (as a complement to the annual report or if it is chosen by the board)	Yes/no	0	1	0.23	0.42	1.33	-0.24

<sup>a</sup> 31 Indicators of SORP 2005—Statement of Recommended Practices

periods and funds held on behalf of others (Appendix). Even though the SORP indicators have a mandatory enforcement for some organizations in the UK depending on their size, in general they should be included in the annual report (Connolly and Hyndman 2004; Hyndman and McMahon 2010). Therefore, we see SORP as providing important indicators that can be disclosed voluntarily by the Portuguese Foundations. Gordon et al. (2010) consider these indicators as the best disclosure practices and important information for the different stakeholders regarding the organizations' objectives and results.

The descriptive statistics show that Portuguese Foundations give more relevance to the disclosure of the indicators of Index6—future plans (56.3%), Index3—objectives and activities (56.2%) and Index1—administration details (53.7%), while the less relevant indexes are Index4—achievements and performance (38.5%) and index7—funds held on behalf of others (21.8%) (Table 1). The most disclosed indicators are those related to the mission and vision of the Foundation, the number of employees and volunteers, the objectives of annual activities, the name of the trustees and advisers' members and the results achieved through the main activities (qualitative and quantitative information).

The means, standard deviations and validity of constructs used in the study are presented in Table 1. The dimension of constructs was interrelated and was subjected to confirmatory factor analysis (Byrne 2010).

The present model involves two types of variables: observed and latent variables. According to Byrne (2010), there are theoretical constructs that cannot be observed directly and because of that are termed latent variables or factors. Because they are not observed directly, they cannot be measured directly. Latent variables can only be observed through indicators that are partial and imperfect measures of these variables. Thus, the unobserved variable is linked to one or more of the observed variables, thereby making its measurement possible.

The disclosure process is influenced, directly or indirectly, by different variables. There are variations in observed variables which cause changes in the non-observed ones. These unobserved variables in turn influence other important variables, such as the information disclosure, thus creating a cause–effect reaction.

Our study is supported by a Structural Equation Model (SEM). We propose to study the direct and indirect relationship between Voluntary Disclosure, Board Structure, Organizations' Characteristics and the existence of Auditing.

A Structural Equation Model displays two components (Anderson and Gerbing 1988): the measurement model, which defines how the latent variables (constructs) are operationalized by the observed variables; and the structural model, which defines the causal relations or associations between the latent variables. The assessment of the model fit can be made in two parts: the local fit examination and the global fit examination.

The proposed model was constructed and developed following the steps indicated by Hair *et al.* (1998). Assuming that all relationships between the constructs are linear, we constructed a path diagram of causal relationships, representing four constructs, three of which are endogenous (Board Structure, Auditing and Voluntary Disclosure). The constructs are the dependent or outcome variable in at least one causal relationship (Hair *et al.* 1998).

The model supports one exogenous construct (Organizations' Characteristics) that is not predicted by any other variable. Another step was to focus on converting the path diagram into structural and measurement models.

We start the process of measurement model with an exploratory factor analysis by calculating the internal consistence of each construct using the Cronbach's alpha measure and the variance explained. In the analysis of the reliability of the observed variables, we have used a composite measure of internal consistency and the Cronbach's alpha to determine also the reliability of the latent variables (Table 2). The Cronbach's alpha is used to measure the reliability for a set of construct indicators. The indicator is acceptable if above 0.6 (Pestana and Gagueiro 2003). We have proceeded to the analyses of skewness (SK) and kurtosis (Ku) for each of the observed variables in our measurement model (Byrne 2010). The univariate normality is not violated if the value for the measure of symmetry is  $|Sk| < 3$  and the value for the measure of the peakedness is  $|Ku| < 8$  (Marôco and João 2010) (see Table 1). In our case, the violation of normality is not very severe. Considering Browne and Shapiro (1988), Hair et al. (1998) and Hoyle (1995), we have decided to use the maximum likelihood (ML) estimation method.

The Mahalanobis ( $D^2$ ) and the number of degrees of freedom were calculated with the AMOS software. No observation has shown to have outlier characteristics capable of originating any elimination.

The final step is related to assessing the identification of the structural model. Following the suggestion of Hair et al. (1998), the identification needs to arise when the parameters do not have a unique determination because there is insufficient information in the matrix of variances/covariances of the sample. The Structural Equation Model presented is identifiable; all constructs have at least three indicators as an observed variable (Table 1).

With respect to the measures of structural analysis, Hair et al. (1998) and Jöreskog and Sörbom (1993) suggest that it is important to consider the analysis of the elements of Standardized Residual Covariance Matrix. The standardized residuals represent the differences between the observed and the estimated covariances. Residual values greater than  $\pm 2.58$  are considered statistically significant at the 0.000 level. The authors recommend that the residual values greater than  $\pm 2.58$  should not exceed five percent of the number of standardized residuals. Jöreskog and Sörbom (1993) claim that the standardized residual covariance has a standard normal distribution if the model is correct. Our matrix meets correctly the limits and percentage established by the theoretical research.

**Table 2** Internal reliability

Constructs	Cronbach alpha	Variance explained
Organizations' characteristics	0.6	0.4
Board structure	0.7	0.7
Auditing	0.6	0.5
Voluntary disclosure	0.8	0.6

## Results

Table 3 provides the Pearson's correlation coefficients between the Voluntary Disclosure index, the Organizations' Characteristics, the Board Structure and the Auditing variables. We found a significant and positive correlation between organizational characteristics (Public Fund, Number of Projects and Staff) and some indexes of Voluntary Disclosure (Administration details; Structure and Governance; Objectives and Activities), which suggests that these characteristics of Foundations are important factors that explain their disclosure policy. All characteristics of Foundations have a positive and significant relationship with the Audit Opinion and Mandatory Audit (external); only the number of projects has a positive and significant relationship with Voluntary Auditing, while the other characteristics of the Foundation do not have a significant relationship with the Voluntary Auditing.

Regarding the Board Structure, we found a significant and positive correlation with the Organization's Characteristics, namely the inside members and the remuneration of the members on the board variables. It also has a significant and positive correlation with the mandatory auditing variable. The relationship between Voluntary Disclosure and Board Structure is nonsignificant and negative, which is an unexpected result, especially relating to the remuneration of the CEO, which has a negative relationship with all the indexes of Voluntary Disclosure.

Table 4 presents data on the reliability of constructs. It is a measure of the internal consistency of the constructs' indicators. As indicated by Hair et al. (1998), the individual indicators are all consistent in their measurements if reliable measurements provide the researcher with greater confidence.

We calculate the Reliability and Validity of Latent Variables by using the formula proposed by Fornell and Lacker (1981), also advocated by Hair et al. (1998), using the square of the indicator's standardized loading. Although the theory does not limit the measure to a single scale, Board Structure and Voluntary Disclosure present values above 0.7 and in Organizations' Characteristics the value is above 0.5 for the Variance Extracted. Even so, these constructs present acceptable values regarding construct reliability.

We have employed confirmatory factor analysis for a statistical control analysis regarding all indicator variables loading on the latent factor, and we have reduced Board Structure and Organizations' Characteristics to single factors for the assessment of their global effect on Voluntary Disclosure. According to Byrne (2010), confirmatory factor analysis procedures are used in testing the validity of the indicator variables. The analysis of the standardized estimation of the measurement model coefficients and of the values of the goodness-of-fit measures allowed us to validate the chosen indicators. Following this confirmatory factor analysis, we have proceeded to the construction of the path diagram.

Figure 2 shows the hypothesized model describing the relationship between Organizations' Characteristics, Board Structure, Auditing and Voluntary Disclosure. It also provides the standardized values of path coefficients.

**Table 3** Correlation matrix—Pearson correlation coefficients

	Size	NProject	Pub Fund	Staff	Inside Board	Remun CEO	Remun Board	AOpinion	Mand.Audit
Size	1								
N_Projects	.192*	1							
PubFund	.291**	.156	1						
Staff Members	.194*	.348**	.326**	1					
InsideB	.216**	.191*	.358**	.147	1				
RemunCEO	.104	.251**	.140	.168*	.345**	1			
RemunBoard	.235**	.104	.277**	.167*	.625***	.491**	1		
AOpinion	.242**	.249**	.203*	.274**	.236**	.191*	.164	1	
MAudit	.253**	.240**	.259**	.384**	.183*	.149	.221**	.315**	1
VAudit	.143	.274**	-.026	.154	.033	-.021	.041	.193*	.360**
Index1	.143	.241**	.032	.186*	.011	.019	-.026	.168*	.251**
Index2	.126	.299**	.187*	.189*	.089	-.035	.070	.191*	.207*
Index3	.051	.225**	.189*	.240**	.039	-.039	.060	.129	.125
Index4	.007	.109	.087	.142	.042	-.067	.101	.130	.175*
Index5	.065	.047	.046	.113	-.032	-.055	.068	.088	.165
Index6	-.039	.108	.046	.080	-.022	-.014	.027	.156	.050
Index7	-.033	.069	.047	.129	-.106	-.089	-.079	.129	-.013
	Volunt. Audit	Index1	Index2	Index3	Index4	Index5	Index6	Index7	
Size									
N_Projects									
PubFund									
Staff Members									
InsideB									

Table 3 continued

	Volunt. Audit	Index1	Index2	Index3	Index4	Index5	Index6	Index7
RemunCEO								
RemunBoard								
AOpinion								
MAudit								
VAudit	1							
Index1	.186*	1						
Index2	.085	.488**	1					
Index3	.048	.370**	.537**	1				
Index4	.078	.304**	.327**	.614**	1			
Index5	.058	.260**	.304**	.472**	.660**	1		
Index6	-.069	.211*	.137	.484**	.477**	.384**	1	
Index7	.111	.020	.089	.353**	.529**	.392**	.243**	1

Index—proportion of the foundation individual disclosure score on the seven categories, to the maximum possible score applied in those categories (Index1—administration details; Index2—structure and governance; Index3—objectives and activities; Index4—achievements and performance; Index5—financial analysis; Index6—future plans; index7—funds held on behalf of others). Size—total of assets measured by a scale 1 to 5. N\_Projects—no. of project made by year. PubFund—value of state funds (interests and donations)

StaffMembers—number of paid staff (inside and outside employees) and unpaid voluntary. InsideB—proportion of inside board member (not independent)

RemunCEO—CEO with remuneration variable dummy = 1 if CEO has remuneration, 0 otherwise. RemunB—proportion of remunerated board members

AOpinion—dummy = 1 if the Foundation has audit opinion 0 otherwise. MAudit—dummy = 1 if the foundation has mandatory external audit, 0 otherwise

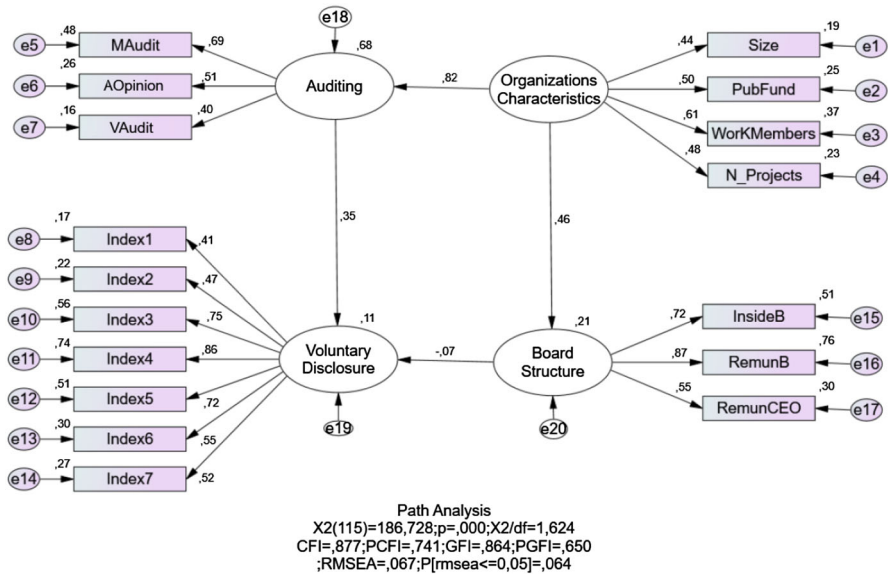
VAudit—dummy = 1 if the foundation has voluntary auditing, 0 otherwise

\* Correlation is significant at the 0.05 level (two-tailed); \*\* Correlation is significant at the 0.01 level (two-tailed)



**Table 4** Reliability and Validity of Latent Variables

	Construct reliability (CR)	Variance extracted (AVE)
Organizations' characteristics	0.6	0.5
Board structure	0.8	0.3
Auditing	0.6	0.3
Voluntary disclosure	0.8	0.4



**Fig. 2** Path analysis of structural model

The standardized values of the path coefficients in the hypothesized model and the multiple regression analyses' values are presented in Table 5. It shows the impact of explanatory variables on outcome variables.

Hypothesis H1 predicted a positive relationship between Organizations' Characteristics and Auditing. The regression weight for Organizations' Characteristics in the prediction of Auditing is significantly different from zero. These results suggest that size, the number of projects, staff members and public funds are positively related to the forms of auditing. All organizations' characteristics have a positive and significant correlation with the mandatory audit opinion and mandatory audit, but only the number of projects has positive and significant relationship with the Voluntary Auditing. The results support hypothesis H1.

Regarding hypothesis H2, it predicted a positive relationship between Auditing and Voluntary Disclosure. It is corroborated since Auditing presents a positive and statistically significant relationship to Voluntary Disclosure.

**Table 5** Hypothesized model

Criterion variable		Standard regression weights ( $\beta$ )	<i>p</i> value	Decision
Auditing	← Organizations' Characteristics	0.825	***	Supported H1
Board_Structure	← Organizations' Characteristics	0.461	0.002**	Supported H3
Voluntary_Disclosure	← Auditing	0.352	0.018*	Supported H2
Voluntary_Disclosure	← Board_Structure	−0.071	0.527	Refuted H4
Size	← Organizations' Characteristics	0.441	***	
PubFund	← Organizations' Characteristics	0.496	***	
WorKMembers	← Organizations' Characteristics	0.612	***	
N_Projects	← Organizations' Characteristics	0.483	***	
InsideB	← Board_Structure	0.716	***	
RemunB	← Board_Structure	0.869	***	
RemunCEO	← Board_Structure	0.549	***	
MAudit	← Auditing	0.693	***	
AOpinion	← Auditing	0.509	***	
VAudit	← Auditing	0.403	***	
Index1	← Voluntary_Disclosure	0.407	***	
Index2	← Voluntary_Disclosure	0.469	***	
Index3	← Voluntary_Disclosure	0.746	***	
Index4	← Voluntary_Disclosure	0.860	***	
Index5	← Voluntary_Disclosure	0.717	***	
Index6	← Voluntary_Disclosure	0.549	***	
Index7	← Voluntary_Disclosure	0.522	***	

\*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$  (two-tailed)

Hypothesis H3 predicted a positive relationship between Organizations' Characteristics and Board Structure. The Organizations' Characteristics present a positive and statistically significant relationship with Board Structure. These results suggest that size, the number of projects, staff members and public funds are positively related to the structure of the board. Results support hypothesis H3.

Hypothesis H4 predicted a positive relationship between Board Structure and Voluntary Disclosure. This relationship presents a negative sign and is statistically nonsignificant. Hence, results do not support hypothesis H4. This means that the proportion of inside members, the proportion of remunerated members on the board and the remuneration of the CEO do not influence Voluntary Disclosure.

The results shown by the correlation suggest, as a complementary analysis that the characteristics of the board (inside membership; CEO and board members remuneration) are not correlated with the Voluntary Disclosure, contrary to our expectations base on extant literature and stakeholder-agency theory. Regarding the global model that includes the constructs Organizations' Characteristics, Auditing and Board Structure and Voluntary Disclosure, we conclude, based on the

Standardized Regression Weights, that staff members and public funding are the most influential among the Organizations' Characteristics. On the other hand, the possibility of the existence of remunerated members on the board has an important role on the Board Structure construct. Mandatory audit is the most relevant observed variable. The most noteworthy indexes for the explanation of Voluntary Disclosure are those related to the objectives and activities, the achievements and performance and the financial analysis. Voluntary Disclosure and Board Structure are nonsignificant and present a negative relation, especially in what is related to the remuneration of the CEO, which has a negative relationship with all the indexes of Voluntary Disclosure.

Table 6 provides information pertaining to the evaluation of the quality of the estimates and of the whole model, testing its empirical and theoretical validity. The goodness-of-fit test (Table 6) shows that the model is fitted to the data. According to Marôco and João (2010), the level of significance of the Chi-square suggests the existence of an acceptable fit between the estimated and the actual data matrix and a good correspondence between the model and the data. Because of the sensitivity of the Chi-square test to sample size, we complemented the analysis with other measures of global fit.

We conclude that all the indicators support the adequate ability of the model to describe the dependencies between variables.

## Discussion and Conclusions

Our study analyzed disclosure practices of the Portuguese Foundations in activity in 2012, in a total of 142 Foundations (representing 50.9% of the foundational sector). We explored whether the Organization's Characteristics, Auditing and Board Structure have a real cause-effect on the Voluntary Disclosure of information considered by the literature as important for the main stakeholders. We proposed a Structural Equation Model, which depicts the direct and indirect relationship

**Table 6** Goodness-of-fit tests

FIT measures	Model	Reference values
Absolute indicators		
Normed Chi-square ( $X^2/df$ )	1.624	[1; 2] Good fit
GFI (goodness-of-fit index)	0.864	[0.8; 0.9] Acceptable fit
Relative indicators		
Comparative fit index (CFI)	0.877	[0.8; 0.9] Acceptable fit
Parsimony indicators		
PCFI (parsimony comparative of fit index)	0.741	[0.6; 0.8] Good fit
PGFI (parsimony goodness of fit index)	0.650	[0.6; 0.8] Good fit
Discrepancy per degree of freedom		
RMSEA (root-mean-square error of approximation)	0.064	[0.05;0.10] Good fit

between Voluntary Disclosure and other constructs. It also explained the relationships among multiple variables (Hair et al. 1998; Byrne 2010).

Our results suggest that the influence of the law as an enforcement mechanism in terms of Foundations' functioning or the attribution of public status by government can influence the governance constitution, and consequently the practices of disclosure. Likewise, foundation size can be a determinant of the constitution and formalization of members in the governing bodies. Larger institutions have more stakeholders, more conflicts of interest and more visibility in society. Our study reveals that these organizations' characteristic can influence the disclosure information.

Findings suggest that Organizations' Characteristics are positively related to the forms of Auditing (H1 supported). The largest Foundations, those which have more projects and staff members, and those who receive more public funds have a stronger tendency to have auditing and mandatory audit opinion or mandatory external auditing, established by law or by the statutory conditions. Despite the model's indirect relationship between Organizations' Characteristics and Voluntary Disclosure, we find a significant and positive correlation between the variables which constitute these constructs. Auditing presents a positive relationship with Voluntary Disclosure (H2 supported). This means that better auditing is related to higher level of disclosure, which is consistent with stakeholder-agency theory: greater external control will lead to greater levels of disclosure, meeting the information sought by donors and other stakeholders. Higher mandatory or voluntary auditing improves Voluntary Disclosure, as suggested by the literature (Ho and Shun Wong 2001; Gordon et al. 2002; Alanezi and Albuloushi 2011). When the Foundations have technical audit of funds that were received, they provide better information and demonstrate greater transparency to founders, donors and government entities.

Results also suggest that Organizations' Characteristics (size, number of projects, staff members and public funds) are positively related to the structure of the board, supporting hypothesis H3 (Murray et al. 1992; Bradshaw et al. 1992; Behn et al. 2010; Saxton and Guo 2011). These findings suggest that the more established and institutionalized an organization is, in terms of size, number of paid staff, unpaid volunteers and number of projects, the higher the involvement of the board will be. The legal form (foundation), the certifications attributed by state such as public utility, the public policies and the funders influence activities in the third sector.

The literature on organizational studies attributes to the size of organizations an impact on the structure of board with regard to management issues (Christensen and Ebrahim 2006; Iyer and Watkins 2008; Atan et al. 2010). Additionally, certifications by law (as a public utility entity) granted to legally constituted organizations offer possibilities for establishing partnerships with public agencies, receiving donations and public funds, tax exemptions, that are enforced by law. Thus, the Foundations' institutional conditions affect the Board Structure and behavior of management. The government must be acknowledged as a crucial stakeholder of foundations. NPOs, in search for the effective support of stakeholders and the resources to accomplish their mission, tend to disclose higher levels of voluntary information.

Our results do not support hypothesis H4. Results show that the Board Structure is less related to Voluntary Disclosure than to the characteristics of the organization. This result may be explained by other factors that were not included in this construct. The number of inside members in the boards has a very low score (Table 1). If we analyze the average CEO percentage, we will see that Foundations have few paid members (both Board members and CEO). The literature review reveals that in most countries there is a high number of paid members and high compensation schemes (Cheng and Courtenay 2006; Laksmana 2008, Saxton et al. 2012), which is not the Portuguese case. Our results seem to suggest that unlike what could be expected from the literature and from stakeholder-agency theory, the Board Structure (internal members, members' and CEO's remuneration) has an opposite effect on the level of Voluntary Disclosure.

Despite the intense growth of the nonprofit sector in the last decades, particularly in Portugal, research on accountability and financial and non-financial information disclosed to stakeholders is fairly incipient. This study is the first to evaluate the impact of Foundations Characteristics on Voluntary Disclosure.

Overall, our results are consistent with the stakeholder-agency theory, since Voluntary Disclosure is an important tool in a cooperative effort to improve the relationships of foundations with their stakeholders and the community and the way society regards these organizations.

In summary, Voluntary Disclosure by NPOs includes many of the disclosure practices adopted in other sectors (public and profit). The importance of addressing stakeholder interests and need for information leads organizations to adopt certain practices because of the pressures exerted by important stakeholders on which they depend, such as the case of governmental agencies on which they depend in terms of funding. Stakeholder-agency theory supports the idea that characteristics of NPOs (e.g., size) have influence on the level of stakeholder expectations (internal and external) and that this also influences disclosure, while the level of pressure from stakeholders makes organizations move around these expectations.

Voluntary Disclosure is justified by the need to control the entity and to reduce information asymmetries, to increase credibility before the different social agents who have contributed with subsidies or grants, enabling Foundations' to create, maintain and reinforce relationships with their stakeholders (stakeholder-agency theory). Information disclosure is a way of showing that the social bodies act according to the stakeholders' expectations, especially of those who are closer to the organization.

Our study emphasizes the importance of the government as a major stakeholder of foundations, besides that of founders, donors and funders, and shows the relevance of stakeholder-agency theory to the analysis of foundations voluntary disclosure practices. These organizations are deeply dependent on state resources, and in a period of financial constraints, the regulatory entities demand higher levels of disclosure to avoid the hard social and financial penalties and compromise the NPOs' mission. The government has become a main stakeholder of NPOs, as evidenced by public policy considerations and the tax benefits that governments offer to NPOs. The public entity utility status or special statutory conditions of legal regimes also influence foundations' practices. For example, to maintain the public

utility status it is mandatory the disclosure of activity reports in addition to the annual report. Foundations subject to close social control by state agencies, and those that do not comply can be penalized and lose their social and financial benefits.

This study is not without limitations. Our research is based on data for only one year. Thus, a longitudinal study could offer further insights about the interplay between Foundations' Characteristics and Voluntary Disclosure. We believe that our study contributes to the accountability literature regarding NPOs by showing the disclosure process path leading to the improvement in the transparency and legitimacy of the third sector.

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## Appendix

Index of voluntary disclosure in the model based on Statement of Recommended Practice (SORP 2005) for charity accounting (Charity Commission 2005)

Index1 Administrative details of trustees and advisers	Name of the trustees and advisers members Professional details of Board (qualifications, professional experience and expertise area) Identification of the CEO or executive manager
Index2 Structure and governance	Methods for recruitment or appointment of new trustees Organizational structure focusing on the responsible department / service and institutions Effective number of employees, number of employees and independent volunteers
Index3 Objectives and activities	Explanation of the risks which the Foundation is exposed Mission and vision Objectives of annual activities and strategy follow Details of the activities contribute to the achievement to the objectives Explanation of changes or differences in society (public benefits) achieved through activities Statement of activities that are funded by grants or subsidies Political donations, grants and bequests Identification / name of subsidies, donations and grants Contribution of volunteers to the activities (monetary and time)

Index4 Achievements and Performance	<p>Results achieved through the main activities (qualitative and quantitative information)</p> <p>Comparison of results to the proposed objectives and annual budget</p> <p>Beneficiaries of activities</p> <p>Performance achieved in relation to established goals of fundraising</p> <p>Results achieved with secondary activities</p> <p>Costs, constraints and strategies of fundraising practice</p> <p>Investment application and performance achieved in related with the initial objectives</p> <p>Individual reports for grants or subsidies</p> <p>Internal or external factors relevant to achieve the objectives (e.g., relationship with employees or position in the community)</p>
Index5 Financial review	<p>Policy on reserves (information on the level of reserves held and the reason of its incorporation)</p> <p>Solutions for activities that present a deficit financing</p> <p>Main funding resources and description of expenditure supported the key objectives of the activities</p> <p>The investment policies followed and their performances</p>
Index6 Plans for future periods	<p>Main future plans and key objectives and activities to achieve them</p>
Index7 Funds held on behalf of others	<p>Description of the funds or assets held on behalf of third parties</p> <p>Description of the activities made with these funds</p>

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