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Is NGO budgeting relevant for donors of Dutch NGOs?

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Abstract

In this master thesis, the reaction of donors on Dutch NGOs' reporting quality has been examined. The donors have been distinct between five different types of donors: private donors, firms, lotteries, governmental organizations, and other NGOs. To assess the reaction of the different types of donors, an event study was used. The study concludes that none of the types of donors react to the reporting quality, which is operationalized by the budget variance of the program ratio. This means that the donors, auditors and NGOs have to rethink about the importance of reporting quality for the NGO sector.

Keywords: NGO; Donations; Reporting quality; Budget; Program ratio.

1. Introduction

In this chapter, an outline of this paper[1] will be deliberated. First a problem in the Dutch economy will be discussed, which will be followed by the goal of this paper. After that, the main research question and the corresponding sub questions will be discussed.

In 2015, more than 5.7 billion euros were donated to Dutch NGOs, which was 0.85% of the Gross Domestic Product (GDP). These donations came from different types of donors such as private donors. Besides the financial contribution of private donors, some people in The Netherlands do voluntary work for NGOs. In 2016, the percentage of Dutch people who volunteered for an NGO was 36%. Besides (private) people, also firms seem to be interested in NGOs; in 2015, more than 70% of all Dutch firms claimed to donate money to an NGO. Also other organizational institutions appear to be interested in the work of NGOs. In 2017, there were more than 43.000 NGOs with an ANBI status, which will be explained more in-depth in chapter two. The biggest Dutch NGO, when looking at the income of 2017, was 'Leger des Heils'. Leger des Heils is the Dutch department of the internationally known Salvation Army. This Dutch department had a total income of 416.9 million euros, which makes it, according to Company.info (2019), a top 1.000 organization in the Dutch economy, when income is the criteria. (Accountant, 2018)

On the basis of the text above, NGOs appear to have a big impact on the Dutch economy. Not only in a direct matter because of the donations, but also in an indirect matter, via the volunteers. In The Netherlands, there is a magazine called 'Accountant'; a magazine that all Dutch CPAs get. In the fourth edition of 2018, the magazine focused on the NGO sector, partially by mentioning the numbers that were described above. Because of the attention of NGOs in the magazine, it gives the impression that CPAs should become more aware of the importance of NGOs.

There is much research done about the importance of accounting and reporting in for-profit organizations, while there is only little research done about the importance of accounting and reporting in (Dutch) NGOs. The studies that investigate the importance of accounting and reporting in NGOs mostly have a qualitative research design or the quantitative research design is rather weak. Also most studies are focused on developing countries. Hence, little well-designed quantitative research has been conducted to show the importance of NGO reporting

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[1] In this master thesis, the term 'this paper' will be mentioned some times. When 'this paper' is mentioned, the master thesis you are reading is meant.

in The Netherlands (or comparable). This lack of little well-designed quantitative research is surprising because, according to a survey of 37.572 people in 32 countries, NGOs have a very high level of public approval. The level of public approval is even higher than for instance "the United Nations, the World Bank, World Public Opinion, news media, the International Monetary Fund, and global companies" (Unerman & O'Dwyer, 2006, p. 306). Because of the positive correlation between reputation/public approval and the reporting quality, it is surprising that there is such a lack of research about the accounting and reporting quality of NGOs (Cao, Myers, & Omer, 2012).

The reason for this lack of research is because academics who are working on this subject often "thought that they were largely alone in their interest in this area" (Unerman & O'Dwyer, 2006, p. 316). However, Unerman and O'Dwyer (2006) found that this is not the case and therefore well-designed quantitative research about this matter will be interesting for a large group of individuals. Therefore, this paper will empirically test the role of reporting quality in Dutch NGOs. This paper will investigate the effects of the reporting quality on the one thing NGOs financially need: donations (Reitan, 2007; Alam, Mia, & Gnepa, 2006).

Understanding the effects of reporting quality on the level of donations is important for a diverse range of actors. First of all, the (potential) donors should understand how reporting quality impacts their economic decisions. If a donor donates money to an NGO, without thinking about the quality of reporting, the donor is not sure if the donation will be spent wisely. Donating money, while not knowing how it will be spent, might decrease the impact the donation will have on making a better world. Therefore, this paper could show donors whether they should be more aware of the reporting quality, before donating money to an NGO.

Second, this paper contributes to auditors by giving them a better understanding on their role in auditing NGOs. An auditor should have an understanding about what is important for the main stakeholders of the audited organization (Hayes, Wallage, & Gortemaker, 2014). Since donors are the most important (financial) stakeholders for NGOs, auditors should know what (financial) information these donors think is important. Therefore, understanding how important reporting quality truly is for donors is an interesting topic for auditors.

Third, NGOs themselves might benefit from this research. If donors seem to believe reporting quality is important for deciding whether to donate money, NGOs should make sure to improve its reporting quality. For example by professionalizing the financial administration department. By doing so, they will increase their donations and therefore have more money to spend on achieving the missions. Since Dutch donors tend to (relatively) donate less money

over the past years, understanding how to increase the level of donations is becoming even more relevant (CBF, 2019a).

Therefore a research about the effects of reporting quality on the level of donations will resolve four problems: (1) The lack of well-designed quantitative research on this topic; (2) Donors do (possibly) not know whether their donations are spent wisely; (3) Auditors do not know their position when auditing an NGO and; (4) NGOs can possibly improve their level of donations by professionalizing the financial administration department, without knowing this.

The goal of this paper is to investigate the effects of the reporting quality of Dutch NGOs on the level of donations. Hereby the main research question is:

'How do donors react to the reporting quality of Dutch NGOs?'

In chapter two, a review will be given of what prior literature says about the relation between the reporting quality and the level of donations. First, the most important concepts and their relation will be discussed, such as a definition of donors. This part will show that there are different types of NGOs; namely private donors, firms, governmental organizations, lotteries, and other NGOs. Second, an overview of related research will be discussed. Lastly, the expected relations will be explained, which will be used to develop hypotheses. Because there are five types of donors, the main research question will be divided into five sub-questions; namely how the different types of NGOs react to the reporting quality of Dutch NGOs.

The hypotheses will be tested using an event study methodology on the economic consequences of the quality of reporting. In order to do this event study, the quality of reporting needs to be operationalized. This will be done by the budget-variance of the program ratio. This will be discussed more in-depth in chapter three. The data will be collected partially using CBF's database and partially the data will be hand-collected. In this paper, a sample size of 371 Dutch NGOs will be used because of a lack of availability of CBF's database.

The data will be used to test hypotheses, which can be tested using an OLS regression due to a continuous outcome variable. Besides the reporting quality, other variables will be used as the explaining variables. These variables serve as control variables. Examples of these control variables are the size of the NGO and the NGO sector. The methodology and data collection will be discussed more in-depth in chapter three.

In chapter four the results will be discussed. The main conclusions will be given in chapter five. Besides that, the deficiencies will be highlighted and suggestions for future research will be mentioned.

2. Theoretical background and Hypothesis development

The research question 'How do donors react to the reporting quality of Dutch NGOs?' entails three main concepts, namely Dutch NGOs, reporting quality and donors. In the first paragraph (2.1), these concepts will be described. After that, an overview will be given on prior literature about the relationship between reporting quality and the level of donations (2.2). In paragraph 2.3, an overview of the theoretical background will be given in the form of a figure. Lastly, hypotheses will be developed using the information mentioned in paragraphs 2.1 and 2.2. They will be developed and described in paragraph 2.4.

2.1 Definitions

2.1.1 Defining Dutch NGOs

In this paragraph, the term Dutch NGOs will be explained. Also, the different sectors of NGOs will be mentioned and the CBF-quality-mark and ANBI status will be discussed.

NGOs are different from businesses because a business mainly pursues material interest (profit), while NGOs exist to pursue a particular principled belief. Therefore an NGO is a non-profit organization (Sell & Prakash, 2004; Uphoff, 1992). NGOs differ from governmental organizations because they deliver the services that the government retreated from (Kajimbwa, 2006). Therefore, NGOs exist to deliver services that the government fails to deliver. Also, NGOs differ from businesses and governments in the way they generate income. NGOs (often) generate income by receiving donations, while businesses get paid for delivering products or services to their customers and the government receives its money through taxes (Centraal Bureau voor de Statistiek, 2014; Chowdhury, 2010; Reitan, 2007). NGOs are therefore sometimes called funding-based enterprises (Alam, Mia, & Gnepa, 2006). Because of this, an NGO can be defined as follows: "A self-governing, private, not-for-profit [organization] and with an explicit social mission", that "must maintain donor patronage" in order to achieve this mission (Reitan, 2007, p. 450).

There are many synonyms to indicate the NGO sector, for example; charities, the third sector, the voluntary sector and the philanthropic sector (Anheier & Kendall, 2012; Mirabella, Gemelli, Malcolm, & Berger, 2007). In this paper, the name NGO is used because this is the most common term in the current literature.

Dutch NGOs are NGOs that are signed up in the Dutch Chamber of Commerce. In The Netherlands, 'Centraal Bureau voor Fondswervende ondernemingen' (CBF) is the independent

supervisor of Dutch NGOs. CBF's task is to inform NGOs' stakeholders by making NGO-related data available and answering NGO-related questions. Also, CBF gives feedback to the NGO sector to contribute to the professionality of NGOs. Besides this, CBF checks if an NGO meets or beats particular criteria. If an NGO meets or beats those criteria, the NGO will get a CBF-quality-mark. These criteria are mainly focused on the level of contribution of the NGO to a better world. The NGOs' information that will be used in this paper will be retrieved from CBF's database, therefore only NGOs in this database will be used in this paper. CBF's database will be elaborated more in-depth in chapter three.

NGOs pursue a particular principled belief, which might differ from other NGOs. For example, World Wildlife Fund (WWF) tries "To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature" (WWF, 2019), while Amnesty International is pursuing "A world in which every person enjoys all of the human rights enshrined in the Universal Declaration of Human Rights and other international human rights instruments" (Amnesty International, 2019). WWF is focused on protecting nature, while Amnesty International is focused on human rights. CBF makes a distinction between eight sectors of NGOs, namely NGOs that are focused on Animals, Art and Culture, International aid and Human Rights, Nature and Environment, Religion, Health, Education or Welfare.

Besides the CBF-quality-mark, Dutch NGOs can get an ANBI status. ANBI stands for 'Algemeen Nut Beogende Instelling', which means the NGO should be an organization that serves the public interest. So, to get an ANBI status, an NGO should serve the public interest. Whether an NGO serves the public interest will be tested under particular criteria, which have been established by the Dutch government. These criteria are mainly focused on the internal controls and external reporting of the NGO. Having an ANBI status might benefit NGOs because donating to these NGOs will give tax exemptions for donors, which might cause an increase in donations. (Steenvoorde, 2011)

2.1.2 Defining Reporting Quality

In this paragraph, reporting quality will be defined. Also, in this paragraph, it will be explained how reporting quality can be measured using a budget-variance.

According to the CFA Institute, (financial) reporting quality is "the accuracy with which a company's reported financials reflect its operating performance and their usefulness for

forecasting future cash flows" (Robinson, Henry, Pirie, & Broihahn, 2012, p. 2). This means that if the financial reports give a trustworthy and true view on the financial performance of an organization, the reporting quality is high.

In The Netherlands, financial reporting in the NGO industry has an important role. The financial reports reflect, among other things, the costs related to their mission as well as the overhead costs. The percentage of the mission-related costs is an important ratio that the government uses in deciding if an NGO deserves the ANBI status. Also, CBF uses financial statements to decide whether an NGO deserves a CBF-quality-mark. Because the government and CBF use these financial statements to judge NGOs, these financial statements (and its quality) are quite important. Besides these two examples, other stakeholders might look at the financial statements as well. In this paper, it will be discussed whether (potential) donors also use financial statements to decide if they donate money. The use of financial statements can be direct, truly looking at the financial statements, or indirect, by looking at information retrieved from financial statements.

When donors decide to donate money, they look at a variety of factors to choose an NGO. Looking at financial information, the percentage of overhead costs seems to be the most important factor for them (Van Iwaarden, Van Der Wiele, Williams, & Moxham, 2009). Therefore, it is logic to measure reporting quality by measuring the quality of the reported costs. This reporting quality can be measured by a so-called budget-variance (Kimani, 2015).

To understand what a budget-variance is, a definition of a budget should be given first. A budget is a prediction of "the revenue and the expenses over a specified future period of time" (Kimani, 2015, p. 1). In other words, a budget explains how much money is planned to be received and how the money will be spent. Mukami (2012) explains that a budget is used to make plans on how to achieve the organizational mission, for example, what resources are planned to be available and how much will the actions of the organization cost. The budgets can be found in the financial reports and might be called forecasts instead of budgets in these reports.

Budgeting is the process of preparing and monitoring the budget (Lindy & Reiter, 2006). Budgeting quality is how well the budget turns out to be a good prediction of the real money received and how the money is actually spent (Kimani, 2015). Therefore, it is possible to measure budgeting quality by measuring how well the money received and spent is predicted.

Since donors tend to look at how the money will be spent, it is more logical to focus on the prediction of how the money is spent (Van Iwaarden, Van Der Wiele, Williams, & Moxham, 2009; Parsons, 2007; Ling & Neely, 2013; Bekkers, 2010).

In the case of NGOs, spent money can be divided into two categories: mission-related and non-mission-related. This distinction is meant when 'how the money is spent' is mentioned (Van Iwaarden, Van Der Wiele, Williams, & Moxham, 2009). Donors often focus on how much of the money spent is being spent directly on the mission. However, studies that suggest this, have mostly found this association by a normative study instead of empirical evidence.

In this paper, the money spent directly to the mission, divided by the total money spent, is defined by the 'program ratio' (Ling & Neely, 2013). The non-mission-related money spent, divided by the total money spent, is called the percentage of overhead costs (Wilke, 2003).

This means that reporting quality can be measured by the budgeting quality, which can be measured by how well the program ratio was predicted. Therefore, reporting quality can be measured by the predicted program ratio minus the real program ratio. In prior literature, the difference between a prediction in the budget and the real numbers is called a budget-variance. Therefore, the measurement of budgeting quality is the budget-variance of the program ratio.

Furthermore, Kimani (2015, p. 6) states that "The key use of variance analysis is in determining performance evaluation. Performance is attributed by efficiency and effectiveness". Variance analysis is the explanation of the differences between the budgeted and real financial numbers. This variance analysis is often mentioned in the financial reports. Therefore, it is safe to say that the budget-variance can be used to not only measure reporting quality, but also efficiency and effectiveness. This means that if a donor thinks the performance of an NGO is important, the donors might look at the quality of the variance analysis, which is determined by the budget-variance in the financial reports. (Kimani, 2015).

2.1.3 Defining Donors

In this paragraph, the term donors will be defined and the importance of donors in The Netherlands will be explained. After that, the distinction between the different types of donors will be made as well.

"A donor is any organization who gives something of value, usually money. The organization can be a government, a private foundation, a person, or an NGO. Donors have no common ideology" (Sampson, 2002, p. 3). In this paper, donors that donate money are the only donors of interest. According to Sampson, donors can be distinct between governmental organizations, private foundations, persons and NGOs. However, the types of donors that are used in this paper slightly differ from the above-mentioned types. In this paper, donors are

distinct between private donors, firms, lotteries, governmental organizations and (other) NGOs. This because this distinction is often made in Dutch NGOs' financial statements.

These donors are of main importance for the Dutch NGOs and these donors also have an impact on the Dutch economy in general. As mentioned before, 5.7 billion euros were donated to NGOs, in 2015, which was 0.85% of the gross domestic product (GDP). In 2017, the top 25 Dutch NGOs had a total income of more than 1.9 billion euros. In 2017, when focusing on the top 25 NGOs, 37% of the donations came from private donors, 34% of the income came from governmental organizations, 16% from other NGOs, 7% from lotteries, 2% from firms and 4% of the income is from other sources (i.e. selling products). There is a difference in the amount given by donors across the different sectors of NGOs. For example, more than 1.1 billion euros were given to religious NGOs, while only half a billion euros was donated to NGOs that are focused on culture (in 2015). Furthermore, it is known that around 70% of Dutch firms donate money to NGOs. (Accountant, 2018)

The distinction between the types of donors is of main importance, because different types of donors might react differently on the budget-variance. Therefore, the types of donors will be discussed more in-depth.

First of all, the donor with the highest level of donations: private donors. Private donors are people, not organizations, that donate money. The incentives for donating money, for private donors, vary a lot among the people (Aaker & Akutsu, 2009). However, Konrath (2016) explains that there are some main incentives for private donors to donate money. The first main incentive is because they are aware of the need and they want to help the recipients. Also, people donate because they think a particular NGO will spend the money effectively. Furthermore, people might become embarrassed if they (publicly) do not donate money or if they want to feel good about themselves. Besides that, people might donate money "to gain power or recognition for their gifts" or "to enjoy tax incentives for giving" (Konrath, 2016, p. 9), which will be an increased incentive for donating money to NGOs with an ANBI status. This means that private donors donate money because of social-related incentives as well as egoistic-related incentives.

According to Froelich (1999), the revenue generated from private donors can vary a lot across years, which makes private donations unpredictable and unstable. Therefore, understanding what the incentives for private donors are, is very important. This also makes the relation between private donations and budget-variance more important.

Van Iwaarden et al. (2009) investigated what private donors look at, before donating money to a particular NGO. They conclude that the most important factor is the activity of the

NGO (i.e.: Animals or Religion). Also, having a CBF certificate and the efficiency of NGOs turn out to be key factors. Furthermore, private donors think reporting quality is important, but it is not a critical criterion, according to this survey. However, other surveys claim the opposite (Wilke, 2003).

Firms donate money to NGOs as well. Family-controlled firms donate mainly because of their social status or because of their religious background (Li, Au, He, & Song, 2015). However, according to Friedman (1970), (other) firms mainly donate money to increase their own turnover, for example, because of the increase in reputation by having a greater 'Corporate Social Responsibility' (CSR). The European Commission states: "Corporate Social Responsibility is a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis" (European Commission, 2002; Crowther & Seifi, 2018, p. 12). Some studies suggest Friedman's research lacks of empirical evidence (Donaldson & Preston, 1995; Clarkson, 1995). Therefore, Baird, Geylani and Roberts (2012) tried to empirically test this association to understand the relation between CSR and profitability. This study suggests that Friedman was correct. Because of this, an increase in the firm's profit might be the incentive for donating money.

Lotteries (in The Netherlands) often donate a large part of their turnover to NGOs (Wallace, 2004). One of the biggest Dutch lotteries is called Nationale Postcode Loterij. This lottery often donates a fixed amount of money to NGOs they help (Nationale Postcode Loterij N.V., 2019a), which implies that the lottery might not look at the performance of NGOs after they promised to donate money for a given period of time. However, on the website of Nationale Postcode Loterij, criteria for NGOs are mentioned. They state that NGOs are required to show them a clear budget if they want to receive a donation from the lottery (Nationale Postcode Loterij N.V., 2019b; Nationale Postcode Loterij N.V., 2019c).

Governmental organizations donate to NGOs in the form of subsidies (Carapico, 2000; Wilke, 2003). The Dutch government states particular laws that exclude NGOs for receiving subsidies when the government cannot trust the economic feasibility of the NGO's activities (Wettenbank, 2019, p. Article 23). This gives the impression that the Dutch government needs to trust the financial reporting and therefore the budgets.

Other NGOs are NGOs that donate money to achieve their own mission. For example, an NGO for animals donates money to an NGO for monkeys, to strengthen this NGO. Also, (philanthropic) funds belong to this type (Erasmus Centre for Strategic Philanthropy, 2018).

There is a lot of variety in this type of other NGOs, like an NGO that is the ultimate mother of the receiving NGO, a fund only for Art and Culture or non-related NGOs.

2.1.4 Relationship

In this paragraph, the relationship between Dutch NGOs, reporting quality and donors will be elaborated.

The relation between Dutch NGOs, reporting quality and donors can be divided into two sub-relations: the relation between 'the reporting quality and the level of donations' and 'the effect of performance on the level of donations'. This because reporting quality also indicated the performance of an NGO (Robinson, Henry, Pirie, & Broihahn, 2012; Nahr, 2017).

The relation between reporting and donors can be classified as a principal-agent relationship. The principle-agent relationship is a relation that is explained by the agency-theory. The agency theory occurs when an individual has to rely on another's services. In the case of NGOs, the NGO is the agent whereas the donors are principles. The NGO (agent) makes the decisions on how the resources, received from the donors (principles), will be spent. The donors rely on the (financial) information that the NGO gives. This information can be audited by an external accountant. The theory explains that agents might act in such a way, that the agents' interest is more important than the principle's interest. In the NGO sector, the agent can be a manager that receives a bonus when a certain level of donations is achieved. Hereby the agent could act in his own interest instead of the principle's interest or pursuing the NGO's mission by increasing the level of donations, without making an impact on the mission. Because of this difference in interest, information asymmetry could occur. (Olson, 2000)

In the for-profit sector, a well-known example of the agency theory is the relation between shareholders and a firm. In this example, the shareholders (principles) rely on the actions of the firm (agent), in getting financial profits (Olson, 2000). Yet, donors are not the owners of an NGO and do not get (financial) profits from the NGO's actions. However, the agency-theory still holds for NGOs, because donors get other types of (non-financial) profits, like a good feeling (Konrath, 2016).

NGOs have the pressure to maintain the level of donations high enough, to pursue its mission. At the same time, donors do not want to donate money to a low-quality NGO. It is hard for donors to know if an NGO is high- or low-quality, because of the information asymmetry. Therefore, it is hard to know to which NGOs donors should donate money to, in

order to make the donation as efficient and effective as possible. This effect is called adverse selection. (Nahr, 2017)

Donors resolve this information by looking at measurable performance indicators. The performance measurements are mainly focused on the reputation of an NGO (Gent, Crescenzi, Menninga, & Reid, 2015). A bad reporting quality could damage an NGO's reputation and therefore donors might donate more money to a high-quality NGO. Thus, an NGO might benefit (financially) from having a good reporting quality (Nahr, 2017).

Reputation is, as mentioned before, the main measurable performance indicator. Therefore, the effects of the performance on the level of donations should be discussed. There is mixed evidence on how donors react on the performance. The operationalization of the performance is the program ratio. In the next paragraphs, some of the researches will be discussed.

2.2 Prior research

2.2.1 Articles

In this paragraph, some articles that have similarities with this paper will be discussed. A summary of these articles will be given. The articles can be distinct in two categories: papers that focus on the factors that impact the level of donations (paragraph 2.2.1.1) and; articles that investigate the relationship between the reporting quality and the level of donations (paragraph 2.2.1.3).

2.2.1 Articles about factors that impact the level of donations

In this paragraph, the articles that investigate the factors that impact the level of donations will be discussed. By doing so, factors that impact the level of donations can be summed up.

First, the article 'Charities: how important is performance to donors?' will be discussed. This article, written by Van Iwaarden, Van Der Wiele, Williams and Moxham (2009), has the purpose to give more insight on the selection criteria used by private donors when choosing an NGO to donate money to.

The authors find the selection criteria by a survey with 6.696 private donors that responded. The private donors were asked to "rank, in order of priority, the factors that influence the charity to which you [they] donate money" (p. 10). The most important factor was the activity of the NGO (i.e. Nature and Environment), which was followed by the effectiveness of the NGO and whether the NGO is CBF certified. Overhead costs and reporting were two less

important factors, but these factors have similarities with the effectiveness of the NGO, according to another article (Kimani, 2015).

Also, the authors asked the private donors which types of NGOs they prefer to donate money to. The types (sectors) are NGOs that are focused on (1) Health, (2) Well-being, (3) International aid and (4) Nature and Environment. This article found that the third and fourth sectors have been chosen a lot more than the first and second sectors.

Second, the article 'Charitable giving to not-for-profit organizations: factors affecting donations to non-profit organizations' will be discussed. This article, written by Snipes and Oswald (2010), has the purpose to "examine the organizational and consumer demographic characteristics which influence [private] charitable giving" (p. 73).

To investigate the factors that affect the level of donations, a survey has been conducted, which resulted in a sample of 304 respondents. The survey has been executed in the US in a single city. The respondents were asked to rate the likelihood that certain factors influence their decision on whether they donate money to an NGO. The following factors were asked: (1) employer recommendation; (2) previous assistance from or experience with a charity; (3) the scope of the services provided; (4) awareness of the charity and services provided; (5) reputation of the NGO; (6) Advertisements for needed donations. These factors have been used in the survey because prior research concluded that these factors might influence the decision making.

The authors found that the 'advertisements for needed donations' is, according to the respondents, by far the most important factor. However, this factor is closely related to the awareness, scope of services and reputation. Also, the employer recommendation and previous assistance from or experience with a charity are all related to the reputation of the NGO.

Third, the article 'A Literature Review of Empirical Studies of Philanthropy: Eight Mechanisms that drive Charitable giving' will be discussed. This article, written by Bekkers and Wiepking (2011), has the purpose to give a review about studies that investigate the factors that influence donating money to NGOs.

The article used more than 500 studies to investigate the factors, whereby eight factors come forward as the most important factors. The factors are "(1) awareness of need; (2) solicitation; (3) costs and benefits; (4) altruism; (5) reputation; (6) psychological benefits; (7) values; (8) efficacy" (p. 2). The authors do not explain which factor is the most important factor or which one is the least important factor. They do conclude that these factors strengthen each other.

The awareness of need, solicitation, costs and benefits, reputation and efficacy are factors that an NGO can influence. An NGO can increase its awareness of need and the solicitation factors by increasing its marketing activities. An NGO can increase its program ratio to increase the costs and benefits, reputation and efficacy factors.

Altruism, psychological benefits and values are factors that an NGO cannot influence and are therefore irrelevant for this paper.

2.2.2 Summary of Articles about factors that impact the level of donations

In overall the articles discussed above mentioned three important factors that influence the level of donations: (1) The sector of an NGO; (2) Reputation; (3) Efficiency.

The first factor is the distinction between NGOs that are focused on (1) Health, (2) Well-being, (3) International aid and (4) Nature and Environment. This distinction is mentioned by Van Iwaarden et al. (2009).

The second factor is mentioned by all three papers: Van Iwaarden et al. (2009) mention the CBF quality mark; Snipes and Oswald (2010) mention three factors that are related to the reputation; Bekkers and Wiepking (2011) mention the reputation factor as well. Also, the marketing of an NGO might increase the reputation. Therefore the factors awareness and advertisements/solicitating are also related to the factor reputation.

The third factor is mentioned by two papers: Van Iwaarden et al. (2009) mention the overhead costs and efficiency as factors; Bekkers and Wiepking (2011) mention costs and benefits and efficacy as factors. Those four factors are all related to efficiency. Also reporting quality is mentioned by Van Iwaarden et al. (2009), which is related to the efficiency (paragraph 2.1.2).

The summary of the articles can be converted to a table as followed:

Authors	Main factors that increase the level of donations
Van Iwaarden et al.	Sector of the NGO, reputation and efficiency
Snipes and Oswald	Reputation
Bekkers and Wiepking	Reputation and efficiency

Table 1. Summary of factors that increase the level of donations

2.2.1.3 Articles about the relationship between reporting quality and the level of donations

In the last paragraph, efficiency came forward as a main factor that influences the level of donations. As mentioned in paragraph 2.1.2, the program ratio and reporting quality are closely related to this. Therefore this paper investigates the relation between reporting quality and the level of donations. In this paragraph, articles that investigate this relation will be

discussed. The similarity with this paper will be discussed and also the differences with this paper will be deliberated.

First, the article 'Financial reporting quality and investment efficiency of private firms in emerging markets' will be discussed. This article, written by Chen, Hope, Li and Wang (2011), has the purpose to investigate if a high financial reporting quality impacts the investment efficiency positively. The reporting quality is measured by accrual models. The investment efficiency is related to the turnover of the firms in interest, like donations relate to the turnover of NGOs. Therefore, the article is related to this paper.

The article finds a positive relation and therefore a positive association between reporting quality and turnover is found. However, the firms used in the article differ a lot from NGOs (i.e. in the way how they generate income). Therefore, an article that uses organizations that look more like NGOs should be evaluated.

Second, the article 'Financial Determinants for Donation Income of Chinese Non-Public College Foundations' will be discussed. This article, written by Mo and Hong (2018), has the purpose to empirically test what financial factors will increase the level of donations. The study is focused on Chinese College foundations. This means that the study is focused on a very specific type of organization: colleges/universities. Although these organizations are no NGOs, they have some similarities (i.e. not focused on making profit). Therefore, this article might be useful to learn more about the relationship between financial determinants (i.e. reporting quality) and the level of donations from NGOs.

The authors conclude, based on empirical evidence from all 407 non-public college foundations, financial determinants (i.e. transparency) are positively associated with the level of donations. They state that because of this, college foundations should focus on strengthening the financial information disclosure.

As mentioned before, the article is focused on Chinese Colleges and therefore the sample is rather different from the NGO sector in The Netherlands. Hence the conclusion cannot be extended to the NGO sector in The Netherlands. Therefore, an article that uses NGOs should be evaluated.

Third, the article 'The impact of financial information and voluntary disclosures on contributions to not-for-profit organizations' will be discussed. The paper, written by Parson (2007), has the purpose to "Investigate whether accounting information reduces perceived uncertainty about nonprofit operations" (p. 179). The paper examines this main research question by testing two hypotheses: (1) "Prospective individual donors who receive positive

financial accounting information (efficiency measures) are more likely to donate than those who do not" and; (2) "Prospective individual donors who receive voluntary SEA disclosures [effectiveness measures] are more likely to donate than those who do not receive voluntary SEA disclosures" (p. 183). This means that the article is focused on the reaction of donors on efficiency and effectiveness outcomes of NGOs.

The experiment is focused solely on the NGO called 'People with AIDS Coalition-Houston' (PWACH). Emails have been sent to 8.044 potential donors. These potential donors were categorized into potential donors who have been donating money before and potential donors who did not. Also, there were four types of emails sent: a letter without financial information and effectiveness measures; a letter with only financial information; a letter with only effectiveness measures; and a letter with both financial information and effectiveness measures. Both types of potential donors received emails that were randomly assigned. After the mails has been sent, some potential donors (1.16%) donated money. In order to test the hypotheses, the author developed a regression model.

After running the regression, the author concludes that there is no significant evidence found that voluntary disclosure of the efficiency and effectiveness leads to a greater level of donations. However, there are some main deficiencies in this article. Given that these results apply to PWACH, does not mean that the results, and therefore the conclusions, are externally valid. Also, not every respondent of the emails will open his/her received mail. Therefore, the authors cannot be sure that donors have truly opened their mails and non-donors did not. The designed information asymmetry can therefore not be measured.

Because of these main deficiencies, a research should be conducted that (1) uses data from more than one NGO and (2) uses data that cannot be biased by information asymmetry.

Fourth, the article 'The effects of Budget Variance on Donor Funding in Non-Governmental Organizations in Kenya' will be discussed. The article, written by Kimani (2015), has the purpose to investigate how budget-variances influence the level of donations of NGOs in Kenya. The article tries to investigate the same relationship as this paper. However, the article investigates the relationship in a third world country, while this paper is focused on a first world country. Though, the article and this paper are closely related due to the same relationship that is tested (budget variance and level of donations).

This article uses a sample of 20 NGOs, due to the statistical needs to test the relationship. However, it might be questionable if a sample of only 20 NGOs can give an overall conclusion. Using this sample, the author developed a regression model to test the relationship:

$$Y = \alpha + \beta * x$$

In this regression model 'Y' is the "level of donor funding", 'a' is the "level of donor funding at year zero when there is no budget variance" and 'x' is the "budget variance" (p. 31). In this regression model, no control variables, for instance the size of the NGO, were used. This is a big deficiency.

The author of the article concludes that 74.3% of the level of donor funding was explained by the budget-variance, in an NGO setting in Kenya. Also, there seems to be a strong positive relationship between those variables.

As written before, the sample size is very small. The author claims that this is the case due to not having enough time to test more NGOs. However, this sample is so small, that the conclusion cannot be trusted completely. Besides that, the regression model had no control variables, which might bias the results. Therefore, the regression model was very weak and the results can, once again, not be completely trusted. Furthermore, the authors do not clearly describe how the budget-variance is measured. For example, a line item that is used for the budget-variance could have been mentioned. Also, the article is only focused on governmental organizations and funds as donors, while there are also other types of donors.

Because of the deficiencies mentioned above, a research should be developed with a larger sample and a regression model that allows control variables and a clear measurement for the variables. Also, this research should include all kinds of donors instead of only governmental organizations and funds.

Fifth, the article 'Charitable ratings and financial reporting quality: Evidence from the human service sector' will be discussed. The article, written by Ling and Neely (2013), has the purpose to "examine whether the financial reporting quality of highly rated charities is more critical to donors than that of the poorly rated ones" (p. 69).

As written in the purpose of the article, the authors use a certain rating for NGOs. These ratings were collected using the database of Charity Navigator, which is the largest NGO rating agency of the U.S. The authors use this dataset because prior research showed that positive ratings from this rating agency have a positive association with (the change of) the level of donations. Therefore, the sample of the article consists of U.S. based NGOs which have been rated by the Charity Navigator. The final sample includes 2.632 NGO-year observations.

The authors make the distinction between highly and poorly rated NGOs. The ratings are based on the accountability and transparency of the NGOs. NGOs are rated with a number of stars, whereby one star is the worst rating and five stars the best. The article adopts three proxies

to measure the reporting quality via regression models. First, a proxy related to fundraising expenses is used. Reporting quality is measured by the change in fundraising expenses, which is not explained by public support, governmental grants, year indicators and group indicators.

The second proxy is related to the administrative expenses. Reporting quality is measured by the change in administrative expenses, which is not explained by public support, governmental grants, , total expenses, total assets, year indicators and group indicators.

The third proxy is related to the program ratio. Reporting quality is measured by the change in the program ratio, which is not explained by the total revenue, (professional) fundraising expenses, total expenses, contributions and group indicators. This third proxy is, according to the authors, the most direct measurement for reporting quality.

The results of the regression models used for the different star-categories are compared. This results in the conclusion that highly rated NGOs do have a higher reporting quality. This conclusion can be made using all regression models.

The article is focused on the U.S. market. Since the U.S. is a first world country, the same conclusions might be true for Dutch NGOs. Also, the article uses the program ratio, which this paper will use as well to measure reporting quality. Therefore, the article and this paper are closely related to each other.

However, there is a deficiency within the regression model. The regression model of the program ratio does not include timing. Because of this, an association is tested instead of a reaction. Using the program ratio of the year before the total contribution might give a better view on the reaction. Though, a comparison between the budgeted and real program ratio might be the best-explained variable, since using this method gives the opportunity to investigate the effect on good/bad news of the program ratio.

Also, the paper does not clearly make the link between how donors react to the reporting quality, while this would be interesting considering their main research question.

Sixth, the article 'When is administrative efficiency associated with charitable donations?' will be discussed. This article, written by Tinkelman and Mankaney (2007), has the purpose to investigate how the administrative efficiency affects the level of donations. The administrative efficiency is calculated by the administrative costs divided by the total costs, which makes the administrative efficiency closely related to the program ratio.

The authors find a negative association, which indicates that donors do look at the administrative efficiency/program ratio when choosing an NGO to donate money to. However, the US-based research has the same timing deficiency as Ling and Neely (2013).

Jacobs and Marudas (2009) established a research that is very closely related to Tinkelman and Mankaney's (2007) article. The research has the same conclusion and deficiency as this paper. However, the regression model was a little bit different and another (US based) sample was used.

Lastly, the article 'Assessing the relation between accountability, performance and donation levels: A view from the Dutch NGO sector' will be discussed. This article, written by Nahr (2017) has the purpose to "examine the relation between accountability, performance and donation levels in the Dutch NGO sector" (p. 4). The article is a master thesis from the master 'Accountancy and Control, specialization Accountancy' from the University of Amsterdam and is published by CBF. The article examines how donors react to increased transparency in accounting, which implies that the article is closely related to this paper. Also, the author investigates the relation between accountability and performance.

In order to investigate these relationships, the following three hypotheses have been tested:

H1: The level of accountability is positively related with the level of performance.

H2: Higher performance is positively related to donation levels.

H3: A higher level of accountability is positively related with donations.

Hypotheses three is the hypothesis that is most similar to this paper's relation that will be investigated. Therefore, only the third hypothesis will be elaborated more in-depth.

The author used a sample of NGOs that are CBF-certified and participated in the 'PWC transparency price'. This resulted in a sample size of 150 NGOs. All accounting information from those NGOs have been conducted via CBF's database. The accountability of NGOs was measured using the accountability scores from the PWC transparency price.

The author measured the performances of the NGOs as how Ling and Neely (2013) measure reporting quality: administration costs, fundraising costs and the program ratio. The level of donations is measured by the amount of private donations plus the institutional donations. The private donations are donations from individuals and firms, whereas institutional donations are received from governmental organizations. Hypothesis three is tested by a regression model. The relation turns out to be insignificant.

Because the transparency score of the year before the donation's year is measured, the reaction is measured instead of an association. This means that higher accountability would not have a significant impact on the level of donations.

However, there are some deficiencies in the article. First, the author uses the PWC transparency price scores to measure accounting quality. Therefore, only NGOs that participated in this competition were used in the sample. Since this score is partially based on subjective measurements, the score might not be an objective measure for accounting quality. Furthermore, the article does not make a distinction between the different types of donors, while the different types of donors might react different on accounting quality.

2.2.2 Comparison of the articles

In this paragraph, a comparison among the articles, which were described above, will be elaborated. Also, the added value of this paper will be discussed, in relation to the articles and a summary will be given as a table at the end of this paragraph.

Chen, Hope, Li and Wang (2011) find a positive association between the reporting quality and turnover of an organization. However, they are focused on for-profit organizations. Mo and Hong (2018) find the same results for non-profit organizations. Although the organizations used are still no NGOs, this gives the impression reporting quality and turnover might correlate to each other. However, Parson (2007) concludes that there is no significant evidence found that voluntary disclosure of the efficiency and effectiveness of an NGO leads to a greater level of donations. Nevertheless Parson concludes this based on only one NGO. Kimani (2015) concludes the opposite: donors use budget-variances (efficiency/effectiveness measurement) to decide whether they donate money. Kimani used a regression model to test this. However, the sample size of Kimani was small and the regression model had no control variables. Ling and Neely (2013) use a larger sample and empirically test the relation between NGOs' reporting quality and ratings, according to Charity Navigator. They find a significant positive association. Tinkelman and Mankaney (2007) and Jacobs and Marudas (2009) find a negative association between administrative costs and the level of donations, what indicates a positive association between the program ratio and the level of donations. The authors, however, do not include timing in the regression models, whereby solely an association is being tested instead of an effect. Nahr (2017) finds empirical evidence that there is no relation between accountability, performance and the level of donations. Nahr used a regression model with control variables

and is focused on the Dutch NGO sector. Also, Nahr uses timing in the regression model. Therefore, Nahr's article is seen as the most complete research on this topic.

However, Nahr's measurement of the accounting/reporting quality (PWC transparency score) has subjective characteristics and therefore a more objective measurement would be better. Since donors claim to focus on the program ratio (Van Iwaarden, Van Der Wiele, Williams, & Moxham, 2009), and budget-variance seems to be an objective measurement for reporting quality (Kimani, 2015), the budget-variance of the program ratio can be used as an objective measurement for reporting quality.

Also, there is a big deficiency in all of the mentioned papers; they are only focused on one of the categories of donors. Parson (2007), Ling and Neely (2013), Tinkelman and Mankaney (2007) and Jacobs and Marudas (2009) are only focused on private donors, whereas Mo and Hong (2018) and Kimani (2015) are focused solely on governmental organizations and funds. Nahr (2017) is focused on all types of donors, but does not make the distinction. Because different types of donors might react differently on the budget-variance of the program ratio, all of the reactions should be tested independently.

Therefore, this paper will investigate how the different types of donors react on the budget-variance of the program ratio of Dutch NGOs.

The summary of the articles can be converted to a table as followed:

Authors	Country	Sample size	Operationalization of reporting quality	Effect of reporting quality on level of donations	Biggest defficiency
Theoretical framework	*N/A*	*N/A*	*Program ratio*	*Positive effect*	*N/A*
Chen et al.	Third world countries	6.727	Accrual model	Positive effect	Based on for-profit firms.
Mo and Hong	China	407	Foundation Transparency Index	Positive effect	Based on Chinese universities.
Parson	United States	One NGO, 8.044 donors	Providing more information	No effect	Based on only one NGO.
Kimani	Kenya	20	Budget variance	Positive effect	Sample size to low, based on a third world country and no control variables in regression model.
Ling and Neely	United States	2.632	Program ratio	Positive effect	Regression model does not include timing.
Tinkelman and Mankaney	United States	7.380	Administrative efficiency	Positive effect	Regression model does not include timing.
Jacobs and Marudas	United States	4.181	Administrative efficiency	Positive effect	Regression model does not include timing.
Nahr	The Netherlands	150	PWC transparency score	No effect	Subjective variable and no distinction between types of donors.

Table 2. Summary of articles

2.3 Theoretical framework as figure

The figure below shows the relation that will be tested in this paper. The figure shows the distinction between three different types of organizations: for profit organizations, NGOs and governmental organizations. The way how they make money, based on paragraph 2.1.1, is mentioned. Furthermore it shows how these organizations can make more money. Since this paper is focused on NGOs only, the middle part is the most important part. It states that an NGO can make more money (receive more donations) through increasing its reputation and

efficiency. These 'variables' have been discussed in paragraph 2.2.1, which shows that these variables are of main interest. Therefore these variables are expected to positively influence the level of donations. These variables can be operationalized by reporting quality, what has been discussed in paragraph 2.2.

Besides the reputation and efficiency (reporting quality related variables), also non-reporting quality related variables affect the level of donations. However, these variables are not being tested in this paper and are, therefore, irrelevant. In short, the figure shows that the paper investigates to what extend the reputation and efficiency of an NGO, operationalized by the reporting quality, affects the level of donations received. This relation can be recognized by the green color.

For profit organizations

• Makes money by selling products and services.

NGOs

• Makes money by receiving donations.

Governmental organizations

• Makes money by receiving taxes.

Increase price + Increase number of customers + Other variables → Make more money

Increase trust (Reputation) + Increase efficiency + Non-reporting quality related variables

Operationalization of reputation and efficiency

Reporting quality

Make more money

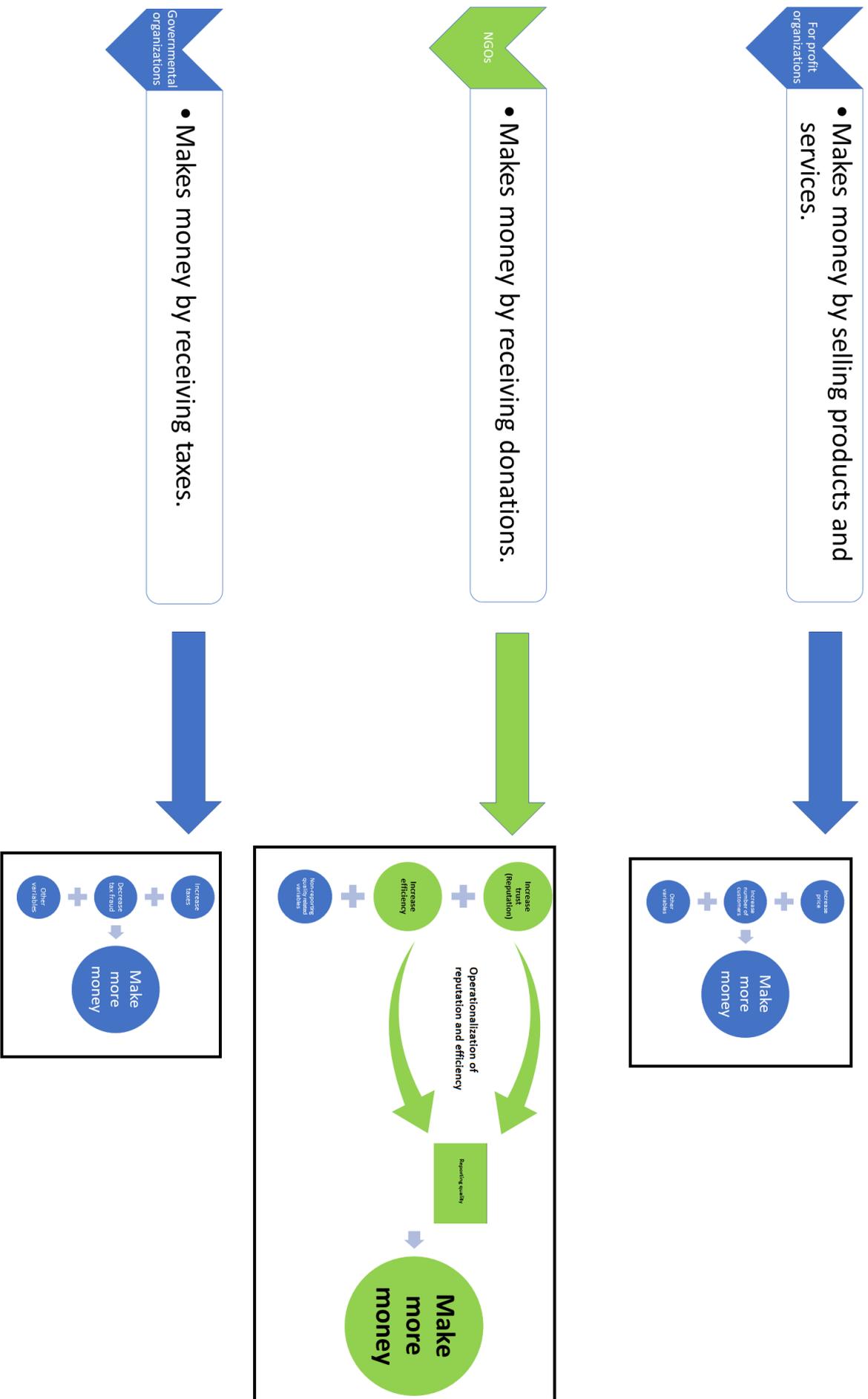Increase taxes + Decrease tax fraud + Other variables → Make more money

Figure 2. Overview theoretical framework

2.4 Hypotheses development

As mentioned before, the different types of donors might react differently on the budget variance of the program ratio of Dutch NGOs. Therefore, each type of donor should be tested separately and therefore each type of donor will need a different hypothesis that can be tested. The hypotheses will be based on the theory mentioned in paragraphs 2.1 and 2.2.

Private donors seem to think that they use the budget-variance of the program ratio in their decision making (Van Iwaarden, Van Der Wiele, Williams, & Moxham, 2009; Snipes & Oswald, 2010; Bekkers & Wiepking, 2011). Most of the authors that use private donors as sample have found this conclusion. The theoretical framework is based on these researches. Therefore, a positive relation between the budget-variance of the program ratio and the donations received from private donors is expected. Because of this, the following hypothesis will be tested:

H1: There is a positive relation between the budget-variance and the donations received from private donors.

There is no literature on whether firms use NGO reporting or budgeting quality to decide if they will donate money. Therefore, Nahr's conclusion is used. Hence, no relation between the budget-variance and the donations received from firms is expected. This is on contrast with the relation according to the theoretical framework. The following hypothesis will be tested to examine the expectation:

H2: There is no association between the budget-variance and the donations received from firms.

There is no literature on whether lotteries use NGO reporting or budgeting quality to decide if they will donate money. However, Nationale Postcode Loterij asks NGOs to show them a clear budget if they want to receive a donation from the lottery, as can be seen in paragraph 2.1.3. This implies that lotteries do use budgets to make donation decisions, which suggests that they might use a budget-variance analyses to make donation decisions. Therefore, a positive relation between the budget-variance and the donations received from lotteries is

expected. This is in line with the relation according to the theoretical framework. Therefore, the following hypothesis will be tested:

H3: There is a positive association between the budget-variance and the donations received from lotteries.

Governmental organizations are controlled by the Dutch Government. As mentioned in paragraph 2.1.3, the Dutch government states particular laws that exclude NGOs for receiving subsidies when the government cannot trust the economic feasibility of the NGOs' activities. This gives the impression that the Dutch government needs to trust the financial reporting and therefore the budgets of the NGOs. Also, Kimani (2015) showed empirical evidence that governmental organizations and budget-variances are positively related, although this was about the government in Kenya. Because of this, it is expected that the Dutch government will look at the budget-variance and therefore a positive relation between budget-variance and subsidies is expected. This is in line with the relation according to the theoretical framework. The following hypothesis will be tested to examine the expectation:

H4: There is a positive association between the budget-variance and the donations received from governmental organizations.

Other NGOs is a very broad type of donor due to the different kinds of other NGOs. However, Kimani (2015) showed empirical evidence that donations from funds, which fall within the category 'Other NGOs', and budget-variances are positively related. Because of this, a positive association between the budget-variance and the donations received from other NGOs is expected. This is in line with the relation according to the theoretical framework. Therefore, the following hypothesis will be tested:

H5: There is a positive association between the budget-variance and the donations received from other NGOs.

To conclude, a positive association is expected between the budget-variance and the donations received from (1) private donors, (2) lotteries, (3) governmental organizations and (4) other NGOs. No association is expected between the budget-variance and the donations received from firms.

3. Research design

In this chapter, an overview will be given of the sample selection and data-sources (data collection and analysis), how the five hypotheses will be tested (explaining variables and regression model) and a libby box will be given (Figure 2).

3.1 Sample selection and data-sources

This research is focused on Dutch NGOs. Therefore, a sample of Dutch NGOs is selected. The sample is restricted with the number of Dutch NGOs that CBF's database has information about, which will be explained later. Besides this restriction, also information that is not available via CBF's database will be used. These restrictions lead to 371 NGOs, whereby information from their financial statements will be used.

There are two main data-sources for Dutch NGOs: Orbis-database and CBF's database. However, the Orbis-database has only the total amount of donations per NGO, instead of the distribution of the donations among the different types of donors. Also, the Orbis-database has not the information on whether an NGO is CBF-certified. These variables are however needed, as it will be described later in this chapter. Therefore, CBF's database will be used.

As mentioned in paragraph 2.1, one of CBF's tasks is to inform shareholders about NGOs by making NGO-related data available. This information includes also the information needed for the research in this paper. CBF's database is not open-source based, which makes it more difficult to collect the data. To get access to the data, a mail must be sent to CBF and CBF will share its data.

CBF's database has information about the real numbers that have been used in the financial statements, but not the budgeted numbers. Therefore the budgeted numbers will be hand-collected via the financial statements that were available via Company.info.

In total, there are 713 NGOs in CBF's database. However, some NGOs have shortcoming and will therefore not be used in this research. The first shortcoming is that some of the data of NGOs is not available via CBF's database. A total of 156 NGOs were eliminated from the sample because of this. The second shortcoming is that some of the NGOs have a program ratio of 100% or 0%. When the program ratio is exactly 100% or 0%, it means that an NGO has no or only overhead costs, which is quite strange. Therefore, the bookkeeper might not understood the idea of mission and non-mission related costs. Therefore, this is seen as a shortcoming. A total of 18 NGOs were eliminated from the sample because of this. The third shortcoming is that some NGOs have missing data on the budgeted numbers. A total of 159 NGOs were

eliminated from the sample because of this. The fourth shortcoming is that some NGOs have a budgeted program ratio of 100% or 0%. A total of 10 NGOs were eliminated from the sample because of this. These shortcomings bring the sample to a total size of 371 NGOs.

Since not all NGOs get money from all types of donors, a distinguish should be made within the sample between the types of donors, and therefore the different hypotheses that will be tested. In total, 359 NGOs received money from private donors; 223 NGOs from firms; 112 NGOs from lotteries; 143 NGOs from governmental organizations; and 269 NGOs from other NGOs. The sample selection is given in the table below.

Sample size overview	
Amount of NGOs in CBF database	714
Amount of NGOs that misses CBF data	156
NGOs with a 100% or 0% program ratio	18
Amount of NGOs that miss budgets	159
NGOs with a budgeted 100% or 0% program ratio	10
Sample size	371
NGOs that received a donation from:	
Private donors	359
Firms	223
Lotteries	112
Governmental organizations	143
Other NGOs	269

Table 3. Sample selection

The samples have been winsorized based on the change in donations and budget variance with a 5% cut-off. This has been done to take outliers into account.

3.2 Hypothesis testing/methodology

The goal of this paper is to examine the reaction of donors on budget-variances, related to the program ratio, for the different types of donors. First, this paragraph will explain how the reaction of donors will be determined. After that, the budget-variance and its meaning will be repeated and control variables will be explained as well. This will be followed by explaining the used statistical model for testing the hypothesis.

3.2.1 Explaining the variables

The reaction of the donors will be determined by the relative change in donations between 2016 and 2017. This dependable variable will be specific for the different kinds of donors (i.e.

the change in donations received from private donors). Because there are five kinds of donors (and therefore hypotheses), five different reaction-variables in donations will be used: Donation Change of Private donors (*DCP*), Firms (*DCF*), Lotteries (*DCL*), Governmental organizations (*DCG*) and other NGOs (*DCN*).

The budget-variance (*BudVar*) is the budget variance of the money spent directly to the mission, divided by the total money spent. This variable, which is called the program ratio, is discussed more in-depth in paragraph 2.1.2. The donor reaction is calculated as the reaction in the year 2017. In this year, donors could have looked at the financial statements of 2016. Therefore, the budget variance of 2016 will be used (budgeted costs of 2016 versus real costs of 2016). This variable is the main independent variable.

As described in paragraph 2.2.1, donors do not only look at the budget-variance when deciding whether they will donate money but also at non-budget-variance factors. To be sure that these factors are not included in the relation between the reaction of donors and the budget-variance, these factors should be included in the model as separate factors: control variables. A factor will be included as a control variable when it is expected that this factor might influence the donors' decision on whether they donate money.

Van Iwaarden et al. (2009) conclude that the type of NGOs is of main interest. To be sure this effect is not included in the relation between donations and budget-variance, (dummy) control variables will be used if an NGO belongs to a particular type of NGO.

The following variables will be used: Animals (*AN*), Art and Culture (*AC*), International aid and Human Rights (*IH*), Nature and Environment (*NE*), Religion (*RE*), Education (*ED*), Health (*HE*) and Welfare (*WE*).

Also, Van Iwaarden et al. (2009), Snipes and Oswald (2010) and Bekkers and Wiepking (2011) concluded that the reputation of NGOs is an important factor. This can be operationalized by the variable *CBF*, which stands for having a CBF certificate at the end of 2016's book year. When an NGO has a CBF certificate, it means the NGO truly helps to make the world a better place. Also, this means that the NGO uses its money thoughtfully and the (financial) information is being audited by an independent party (CBF, 2019b). Having a CBF certificate increases the reputation of an NGO.

Two other reputation-related control-variables will be used. First, whether the 2016 financial statement is audited by an audit firm (*AuditFirm*) because this can increase the trust in the financial statements. Note that CBF wants NGOs being audited by an independent party, that should not be an audit firm per se. Second, whether the 2016 financial statement is audited

by a Big Four audit firm (*Big4*), because being audited by a Big Four firm might increase the audit quality and therefore increase the trust in the financial statements (Niemi, 2004).

The size of the NGO is closely related to the reporting quality, according to Seu, Flanagan and Orgad (2015). Because this might affect the relation between budget-variance and donations, the control variable *Size* will be used as well. The size is equal to the total donations received in 2016.

3.2.2 Regression models

When the dependent, independent and control variables are combined, the following five regression models will be used to test the hypotheses:

H1: $DCP = \alpha + \beta_1 * BudVar_i + \beta_2 * AN_i + \beta_3 * AC_i + \beta_4 * IH_i + \beta_5 * NE_i + \beta_6 * RE_i + \beta_7 * ED_i + \beta_8 * HE_i + \beta_9 * WE_i + \beta_{10} * CBF_i + \beta_{11} * AuditFirm_i + \beta_{12} * Big4_i + \beta_{13} * Size_i + \varepsilon$

H2: $DCF = \alpha + \beta_1 * BudVar_i + \beta_2 * AN_i + \beta_3 * AC_i + \beta_4 * IH_i + \beta_5 * NE_i + \beta_6 * RE_i + \beta_7 * ED_i + \beta_8 * HE_i + \beta_9 * WE_i + \beta_{10} * CBF_i + \beta_{11} * AuditFirm_i + \beta_{12} * Big4_i + \beta_{13} * Size_i + \varepsilon$

H3: $DCL = \alpha + \beta_1 * BudVar_i + \beta_2 * AN_i + \beta_3 * AC_i + \beta_4 * IH_i + \beta_5 * NE_i + \beta_6 * RE_i + \beta_7 * ED_i + \beta_8 * HE_i + \beta_9 * WE_i + \beta_{10} * CBF_i + \beta_{11} * AuditFirm_i + \beta_{12} * Big4_i + \beta_{13} * Size_i + \varepsilon$

H4: $DCG = \alpha + \beta_1 * BudVar_i + \beta_2 * AN_i + \beta_3 * AC_i + \beta_4 * IH_i + \beta_5 * NE_i + \beta_6 * RE_i + \beta_7 * ED_i + \beta_8 * HE_i + \beta_9 * WE_i + \beta_{10} * CBF_i + \beta_{11} * AuditFirm_i + \beta_{12} * Big4_i + \beta_{13} * Size_i + \varepsilon$

H5: $DCN = \alpha + \beta_1 * BudVar_i + \beta_2 * AN_i + \beta_3 * AC_i + \beta_4 * IH_i + \beta_5 * NE_i + \beta_6 * RE_i + \beta_7 * ED_i + \beta_8 * HE_i + \beta_9 * WE_i + \beta_{10} * CBF_i + \beta_{11} * AuditFirm_i + \beta_{12} * Big4_i + \beta_{13} * Size_i + \varepsilon$

3.3 Libby box

The regression models can be put in a so-called libby box. A libby box shows how the relationship between the dependent and independent variables work in a conceptional way. In the libby box below five boxes can be seen. The upper left box shows the construct of the

independent variable. The upper right box shows the dependent construct. The lower left box shows the operationalization of the independent variable and the lower right box shows the operationalization of the dependent variable. Underneath those four boxes, one other box can be found. This box shows the control variable. The libby box layout used is from a Powerpoint presentation of Dr. Ferdinand Elfers of the course 'Introduction to Accounting Research' of the master in Accounting, Auditing and Control of the Erasmus University.
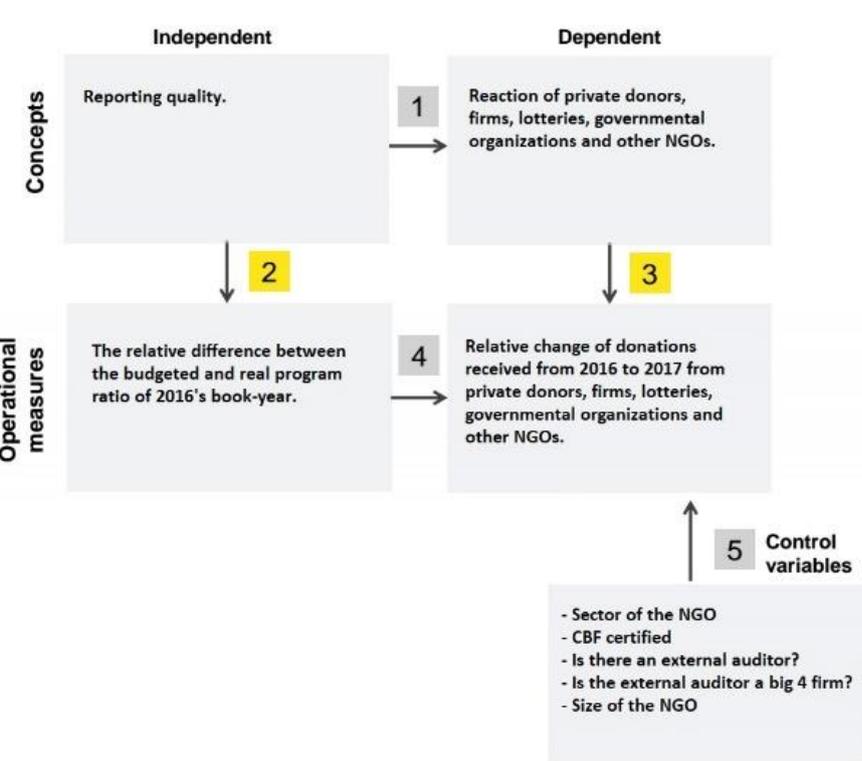
Figure 2. Libby box

4. Results

In this chapter, an overview will be given of the results from the data analysis. First, the descriptive statistics will be given and explained. Also the correlation matrixes will be given and explained. Lastly, the regression models will be given and interpreted.

4.1 Descriptive statistics

In the tables below, the descriptive statistics of the samples are given. In the first column, the variables are mentioned. The second column shows the number of observations. The third column shows the mean of the observations. The fourth column shows the standard deviation of the column. The fifth column shows the lowest value and the sixth column shows the highest value.

Variable	Obs	Mean	Std. Dev.	Min	Max
DCP	359	.045377	.4541815	-.6477128	1.416.789
BudVar	359	.0083702	.0587222	-.1303575	.1475355
AN	359	.0529248	.2241958	0	1
AC	359	.0362117	.1870773	0	1
IH	359	.356546	.4796476	0	1
NE	359	.0835655	.2771213	0	1
RE	359	.0779944	.2685371	0	1
ED	359	.005571	.074535	0	1
HE	359	.1504178	.3579794	0	1
WE	359	.2367688	.4256925	0	1
CBF	359	.8746518	.3315754	0	1
AuditFirm	359	.4233983	.4947869	0	1
Big4	359	.1030641	.3044669	0	1
Size	359	9937834	3.17e+07	6875	4.05e+08

Table 4. Descriptive statistics of private donors

In the table above, the descriptive statistics of the private donors' sample is given. This sample includes 359 observations. The largest decrease in donations received is 64,8% and the largest increase is 141,7%. On average, the change in donations increased with 4,5%. The largest negative budget variance is 13,0% and the largest positive budget variance is 14,8%. On average, the budget variance is 8,4% (positive).

All sectors are used in this sample, since all sectors have '1' as the maximum value. The sector that occurs the most in the sample is 'International aid and Human Rights' (35,7%), since this sector has the largest mean value.

In this sample, 87,5% of the NGOs was CBF-certified, 42,3% was audited by an external auditor and 10,3% was audited by a big four audit firm. The sample includes NGOs that had a total turnover ranging from €6.875 to €405.038.132.

Variable	Obs	Mean	Std. Dev.	Min	Max
DCF	223	.3040326	.9986378	-.7639802	3.320.176
BudVar	223	.0102907	.0460212	-.0797655	.1187368
AN	223	.0403587	.1972419	0	1
AC	223	.0358744	.1863954	0	1
IH	223	.3721973	.4844781	0	1
NE	223	.0896861	.2863743	0	1
RE	223	.0986547	.2988687	0	1
ED	223	0	0	0	0
HE	223	.1479821	.355881	0	1
WE	223	.2152466	.411918	0	1
CBF	223	.8878924	.3162086	0	1
AuditFirm	223	.5515695	.4984523	0	1
Big4	223	.1390135	.3467389	0	1
Size	223	1.49e+07	4.01e+07	7347	4.05e+08

Table 5. Descriptive statistics of firms

In the table above, the descriptive statistics of the firms' sample is given. This sample includes 223 observations. The largest decrease in donations received is 76,4% and the biggest increase is 332,0%. On average, the change in donations increased with 30,4%. The biggest negative budget variance is 8,0% and the biggest positive budget variance is 11,9%. On average, the budget variance is 1,0% (positive).

The sector 'Education' is not included in this sample, which is indicated by a maximum value of '0'. All other sectors are used in this sample, since all other sectors have '1' as the maximum value. The sector that occurs the most in the sample is 'International aid and Human Rights' (37,2%), since this sector has the largest mean value.

In this sample, 88,8% of the NGOs was CBF-certified, 55,2% was audited by an external auditor and 13,9% was audited by a big four audit firm. The sample includes NGOs that had a total turnover ranging from €7.347 to €405.038.132.

Variable	Obs	Mean	Std. Dev.	Min	Max
DCL	112	.1492629	.5244844	-.7227481	1.524.097
BudVar	112	.0046782	.0312122	-.0547203	.0696117
AN	112	.0714286	.2586969	0	1
AC	112	.0625	.2431494	0	1
IH	112	.2321429	.4240972	0	1
NE	112	.0982143	.2989417	0	1
RE	112	0	0	0	0
ED	112	0	0	0	0
HE	112	.2321429	.4240972	0	1
WE	112	.3035714	.4618663	0	1
CBF	112	.9285714	.2586969	0	1
AuditFirm	112	.7410714	.4400151	0	1
Big4	112	.2232143	.4182723	0	1
Size	112	2.25e+07	4.01e+07	251669	2.80e+08

Table 6. Descriptive statistics of lotteries

In the table above, the descriptive statistics of the lotteries' sample is given. This sample includes 112 observations. The largest decrease in donations received is 72,3% and the largest increase is 152,4%. On average, the change in donations increased with 14,9%. The largest negative budget variance is 5,5% and the largest positive budget variance is 7,0%. On average, the budget variance is 4,7% (positive).

The sectors 'Religion' and 'Education' are not included in this simple, which is indicated by a maximum value of '0'. All other sectors are used in this sample, since all other sectors have '1' as the maximum value. The sector that occurs the most in the sample is 'Welfare' (30,4%), since this sector has the largest mean value.

In this sample, 92,9% of the NGOs was CBF-certified, 74,1% was audited by an external auditor and 22,3% was audited by a big four audit firm. The sample includes NGOs that had a total turnover ranging from €251.669 to €280.448.132.

Variable	Obs	Mean	Std. Dev.	Min	Max
DCG	143	.2677466	.9412704	-.6492424	3.604.444
BudVar	143	.0119658	.0311236	-.0453924	.0710546
AN	143	.0559441	.2306214	0	1
AC	143	.0559441	.2306214	0	1
IH	143	.3636364	.4827365	0	1
NE	143	.2237762	.4182388	0	1
RE	143	0	0	0	0
ED	143	0	0	0	0
HE	143	.1118881	.3163368	0	1
WE	143	.1888112	.3927342	0	1
CBF	143	.9370629	.2437033	0	1
AuditFirm	143	.5734266	.4963176	0	1
Big4	143	.2027972	.403496	0	1
Size	143	2.23e+07	4.86e+07	27424	4.05e+08

Table 7. Descriptive statistics of governmental organizations

In the table above, the descriptive statistics of the governmental organizations' sample is given. This sample includes 143 observations. The largest decrease in donations received is 64,9% and the largest increase is 360,4%. On average, the change in donations increased with 26,8%. The largest negative budget variance is 4,5% and the largest positive budget variance is 7,1%. On average, the budget variance is 1,2% (positive).

The sectors 'Religion' and 'Education' are not included in this simple, which is indicated by a maximum value of '0'. All other sectors are used in this sample, since all other sectors have '1' as the maximum value. The sector that occurs the most in the sample is 'International aid and Human Rights' (36,4%), since this sector has the largest mean value.

In this sample, 93,7% of the NGOs was CBF-certified, 57,3% was audited by an external auditor and 20,3% was audited by a big four audit firm. The sample includes NGOs that had a total turnover ranging from €27.424 to €405.038.132.

Variable	Obs	Mean	Std. Dev.	Min	Max
DCN	269	.3292028	1.651.331	-.9650532	5.457.328
BudVar	269	.0144867	.0502089	-.0797655	.1475355
AN	269	.0371747	.1895424	0	1
AC	269	.0446097	.2068301	0	1
IH	269	.3717472	.4841722	0	1
NE	269	.0817844	.2745467	0	1
RE	269	.0892193	.2855914	0	1
ED	269	0	0	0	0
HE	269	.1524164	.3600939	0	1
WE	269	.2230483	.4170664	0	1
CBF	269	.8773234	.3286771	0	1
AuditFirm	269	.4981413	.5009285	0	1
Big4	269	.1226766	.3286771	0	1
Size	269	1.24e+07	3.63e+07	24159	4.05e+08

Table 8. Descriptive statistics of other NGOs

In the table above, the descriptive statistics of the other NGOs' sample is given. This sample includes 269 observations. The largest decrease in donations received is 96,5% and the largest increase is 545,7%. On average, the change in donations increased with 32,9%. The largest negative budget variance is 79,8% and the largest positive budget variance is 14,8%. On average, the budget variance is 1,4% (positive).

The sector 'Education' is not included in this sample, which is indicated by a maximum value of '0'. All other sectors are used in this sample, since all other sectors have '1' as the maximum value. The sector that occurs the most in the sample is 'International aid and Human Rights' (37,2%), since this sector has the largest mean value.

In this sample, 87,7% of the NGOs was CBF-certified, 49,8% was audited by an external auditor and 12,3% was audited by a big four audit firm. The sample includes NGOs that had a total turnover ranging from €24.159 to €405.038.132.

4.2 Correlation matrixes

In the tables below, the correlation matrixes of the samples are given.

	DCP	BudVar	AN	AC	IH	NE	RE	ED	HE	WE	CBF	AuditFirm	Big4	Size
DCP	1													
BudVar	0.0769	1												
AN	0.0078	-0.0892	1											
AC	-0.0741	0.0343	-0.0458	1										
IH	-0.0689	0.0012	-0.1760	-0.1443	1									
NE	0.1134	0.0961	-0.0714	-0.0585	-0.2248	1								
RE	-0.0419	-0.0009	-0.0688	-0.0564	-0.2165	-0.0878	1							
ED	0.1103	0.1456	-0.0177	-0.0145	-0.0557	-0.0226	-0.0218	1						
HE	-0.0130	-0.1153	-0.0995	-0.0816	-0.3132	-0.1271	-0.1224	-0.0315	1					
WE	0.0503	0.0401	-0.1317	-0.1080	-0.4146	-0.1682	-0.1620	-0.0417	-0.2344	1				
CBF	-0.0242	-0.0095	-0.0984	-0.0167	0.0710	0.1143	-0.1722	-0.0847	0.0416	-0.0068	1			
AuditFirm	-0.0474	0.0064	0.0744	0.0150	-0.0611	0.0264	-0.0180	-0.0641	0.0179	0.0134	0.1882	1		
Big4	-0.0376	-0.0249	-0.0392	0.0324	0.0155	0.0632	-0.0644	-0.0254	-0.0145	0.0052	0.1283	0.3956	1	
Size	-0.0319	-0.0027	-0.0320	-0.0169	0.0656	0.0304	-0.0608	-0.0220	-0.0230	-0.0078	0.1013	0.2439	0.3713	1

Table 9. Correlation matrix private donors

The correlation matrix above is the matrix of the private donors' sample. The two variables that have the strongest positive linear relation are 'Big4' and 'AuditFirm' (0.3956). The two variables that have the strongest negative linear relation are 'Welfare' and 'International aid and Human Rights' (-0.4146). However, these correlations are not very strong (> 0.7000 or < -0.7000). This gives the impression that there is no linear relationship among the variables.

	DCF	BudVar	AN	AC	IH	NE	RE	ED	HE	WE	CBF	AuditFirm	Big4	Size
DCF	1													
BudVar	-0.0042	1												
AN	-0.0611	-0.1284	1											
AC	0.0784	0.0278	-0.0396	1										
IH	0.0247	0.0135	-0.1579	-0.1485	1									
NE	0.0364	0.0940	-0.0644	-0.0605	-0.2417	1								
RE	0.0880	0.0112	-0.0678	-0.0638	-0.2547	-0.1038	1							
ED	.	.	.	.	.	.	.							
HE	0.0039	-0.0926	-0.0855	-0.0804	-0.3209	-0.1308	-0.1379	.	1					
WE	-0.1277	0.0395	-0.1074	-0.1010	-0.4033	-0.1644	-0.1733	.	-0.2183	1				
CBF	-0.0445	-0.0659	-0.1438	-0.0079	0.0972	0.1115	-0.2161	.	0.0680	-0.0214	1			
AuditFirm	-0.1077	-0.0416	0.0475	0.0770	-0.0332	-0.0641	-0.1553	.	0.0964	0.0554	0.2226	1		
Big4	-0.0230	-0.0679	-0.0165	0.0619	0.0660	0.0100	-0.1329	.	-0.0214	0.0103	0.1428	0.3623	1	
Size	-0.0313	-0.0366	-0.0211	-0.0347	0.0744	0.0018	-0.1034	.	-0.0223	0.0314	0.1142	0.2215	0.3613	1

Table 10. Correlation matrix firms

The correlation matrix above is the matrix of the firms' sample. The two variables that have the strongest positive linear relation are 'Big4' and 'AuditFirm' (0.3623). The two variables that have the strongest negative linear relation are 'Welfare' and 'International aid and Human Rights' (-0.4033). However, these correlations are not very strong (> 0.7000 or < -0.7000). This gives the impression that there is no linear relationship among the variables.

There are no correlations for the variable 'ED', since the sample does not include NGOs that are focused on education.

	DCL	BudVar	AN	AC	IH	NE	RE	ED	HE	WE	CBF	AuditFirm	Big4	Size
DCL	1													
BudVar	-0.1018	1												
AN	-0.0228	-0.1458	1											
AC	0.0063	0.0289	-0.0716	1										
IH	0.0840	0.0279	-0.1525	-0.1420	1									
NE	-0.1559	0.0220	-0.0915	-0.0852	-0.1815	1								
RE	.	.	.	.	.	.	.							
ED	.	.	.	.	.	.	.	.						
HE	-0.0181	-0.0114	-0.1525	-0.1420	-0.3023	-0.1815	.	.	1					
WE	0.0499	0.0371	-0.1831	-0.1705	-0.3630	-0.2179	.	.	-0.3630	1				
CBF	-0.1709	-0.0072	-0.3269	-0.0716	0.0704	0.0915	.	.	0.1525	-0.0431	1			
AuditFirm	0.1130	-0.1415	0.0057	-0.1000	0.0836	-0.0789	.	.	0.0836	-0.0530	0.0735	1		
Big4	-0.0209	0.0076	-0.0654	0.0388	0.2639	-0.1049	.	.	-0.0916	-0.0741	0.1487	0.3169	1	
Size	-0.0620	-0.0040	-0.0746	-0.0702	0.3702	-0.0443	.	.	-0.0888	-0.1511	0.1334	0.1216	0.2512	1

Table 11. Correlation matrix lotteries

The correlation matrix above is the matrix of the lotteries' sample. The two variables that have the strongest positive linear relation are 'Size' and 'International aid and Human Rights' (0.3702). The two variables that have the strongest negative linear relation are 'Welfare' and 'Health' (-0.3630). This correlation is slightly stronger than the correlation between 'Welfare' and 'International aid and Human Rights'. However, these correlations are not very strong ($>$

0.7000 or < -0.7000). This gives the impression that there is no linear relationship among the variables.

There are no correlations for the variables 'RE' and 'ED', since the sample does not include NGOs that are focused on religion or education.

	DCG	BudVar	AN	AC	IH	NE	RE	ED	HE	WE	CBF	AuditFirm	Big4	Size
DCG	1													
BudVar	-0.0661	1												
AN	-0.0716	-0.0707	1											
AC	-0.0472	0.0941	-0.0593	1										
IH	-0.1722	-0.1609	-0.1840	-0.1840	1									
NE	-0.0781	0.1148	-0.1307	-0.1307	-0.4059	1								
RE	.	.	.	.	.	.	.							
ED	.	.	.	.	.	.	.	.						
HE	0.2599	0.1302	-0.0864	-0.0864	-0.2683	-0.1906	.	.	1					
WE	0.1553	-0.0430	-0.1174	-0.1174	-0.3647	-0.2590	.	.	-0.1712	1				
CBF	0.0216	-0.0453	-0.3128	-0.0622	0.1360	0.1391	.	.	0.0920	-0.1693	1			
AuditFirm	0.1650	-0.2090	-0.0977	-0.0361	0.0641	-0.1476	.	.	-0.0078	0.1632	0.1840	1		
Big4	0.1131	-0.1124	-0.0471	-0.0471	0.1249	-0.1039	.	.	-0.0687	0.0677	0.1307	0.4350	1	
Size	-0.0767	-0.0787	-0.0602	-0.0620	0.1145	-0.1136	.	.	-0.0218	0.0695	0.1065	0.2355	0.3244	1

Table 12. Correlation matrix governmental organizations

The correlation matrix above is the matrix of the governmental organizations' sample. The two variables that have the strongest positive linear relation are 'Big4' and 'AuditFirm' (0.4350). The two variables that have the strongest negative linear relation are 'Nature and Environment' and 'International aid and Human Rights' (-0.4059). However, these correlations are not very strong (> 0.7000 or < -0.7000). This gives the impression that there is no linear relationship among the variables.

There are no correlations for the variables 'RE' and 'ED', since the sample does not include NGOs that are focused on religion or education.

	DCN	BudVar	AN	AC	IH	NE	RE	ED	HE	WE	CBF	AuditFirm	Big4	Size
DCN	1													
BudVar	-0.0309	1												
AN	-0.0399	-0.0769	1											
AC	0.0121	0.0759	-0.0425	1										
IH	0.1881	0.0748	-0.1511	-0.1662	1									
NE	-0.0699	0.0186	-0.0586	-0.0645	-0.2296	1								
RE	-0.0970	-0.0446	-0.0615	-0.0676	-0.2408	-0.0934	1							
ED	.	.	.	.	.	.	.							
HE	-0.0036	-0.1076	-0.0833	-0.0916	-0.3262	-0.1266	-0.1327	.	1					
WE	-0.0907	0.0216	-0.1053	-0.1158	-0.4122	-0.1599	-0.1677	.	-0.2272	1				
CBF	0.0845	-0.0527	-0.1062	0.0259	0.0766	0.1116	-0.2010	.	0.0325	-0.0174	1			
AuditFirm	0.2185	-0.1076	0.0007	0.0368	-0.0279	0.0011	-0.0771	.	0.0119	0.0556	0.2139	1		
Big4	0.1680	-0.1035	-0.0735	0.0290	0.0406	0.0125	-0.1170	.	-0.0009	0.0446	0.1398	0.3753	1	
Size	0.2385	-0.0455	-0.0364	-0.0286	0.0785	0.0218	-0.0837	.	-0.0239	0.0032	0.1125	0.2256	0.3709	1

Table 13. Correlation matrix other NGOs

The correlation matrix above is the matrix of the other NGOs' sample. The two variables that have the strongest positive linear relation are 'Big4' and 'AuditFirm' (0.3753). The two variables that have the strongest negative linear relation are 'Welfare' and 'International aid and Human Rights' (-0.4122). However, these correlations are not very strong (> 0.7000 or < -0.7000). This gives the impression that there is no linear relationship among the variables.

There are no correlations for the variable 'ED', since the sample does not include NGOs that are focused on education.

4.3 Regression models

In the table below, the output of the regression models is given. The variable Cat-Org is a category-variable which indicates to which sector an NGO belongs. Number 1 stands for the sector Animals; number 2 for Art and Culture; number 3 for International aid and Human Rights; number 4 for Nature and Environment; number 5 for Religion; number 6 for Education; number 7 for Health; and number 8 for Welfare. Number 1 (Animals) is not used for the regression model due to the omitted correlation characteristic of a category-variable.

	OLS Regression				
	(1)	(2)	(3)	(4)	(5)
	DCP	DCF	DCL	DCG	DCN
BudVar	0.415	-0.392	-1.706	-2.576	-0.430
	(0.83)	(-0.21)	(-1.03)	(-0.99)	(-0.21)
1.Cat_Org	(.)	(.)	(.)	(.)	(.)
	(.)	(.)	(.)	(.)	(.)
2.Cat_Org	-0.199	0.743	0.216	0.129	0.352
	(-1.45)	(1.62)	(1.05)	(0.51)	(0.51)
3.Cat_Org	-0.0639	0.336	0.337*	0.0444	0.650
	(-0.51)	(1.46)	(1.67)	(0.22)	(1.31)
4.Cat_Org	0.148	0.417	-0.00917	0.183	-0.145
	(0.96)	(1.44)	(-0.05)	(0.78)	(-0.27)
5.Cat_Org	-0.0977	0.514*	(.)	(.)	-0.0765
	(-0.79)	(1.76)	(.)	(.)	(-0.16)
6.Cat_Org	0.570	(.)	(.)	(.)	(.)
	(1.09)	(.)	(.)	(.)	(.)
7.Cat_Org	-0.0289	0.338	0.193	1.014**	0.256
	(-0.21)	(1.22)	(1.03)	(2.56)	(0.46)
8.Cat_Org	0.0170	0.0726	0.234	0.542*	-0.0442
	(0.13)	(0.34)	(1.31)	(1.84)	(-0.09)
CBF	-0.0293	-0.0922	-0.379	-0.0303	0.0321
	(-0.37)	(-0.40)	(-1.59)	(-0.09)	(0.12)
AuditFirm	-0.0299	-0.189	0.150	0.206	0.555***
	(-0.59)	(-1.26)	(1.24)	(1.18)	(2.67)
Big4	-0.0273	0.0514	-0.0713	0.280	0.138
	(-0.57)	(0.23)	(-0.60)	(1.08)	(0.37)
Size	-2.35e-10	-1.01e-10	-1.14e-09	-2.84e-09**	8.02e-09
	(-0.84)	(-0.07)	(-0.98)	(-2.54)	(1.53)
_cons	0.108	0.183	0.234	-0.0645	-0.354
	(0.80)	(0.69)	(1.05)	(-0.24)	(-0.78)
N	359	223	112	143	269
R-squared	0.0422	0.0407	0.0949	0.1601	0.1245

Table 14. OLS regression. (* denotes significance at 10%, ** denotes significance at 5%, *** denotes significance at 1%)

There are no significant variables in the regression models of the donations from private donors, firms, lotteries, and other NGOs.

In the regression model of firms, the variable Religion is (positively) significant at a 10% significance level. This means that there is empirical evidence that firms donate more money to an NGO that is focused on religion than another NGO, when the years 2016 and 2017 are compared.

In the regression model of lotteries, the variable International aid and Human Rights is (positively) significant at a 10% significance level. This means that there is empirical evidence that lotteries donate more money to an NGO that is focused on international aid and human rights than another NGO, when the years 2016 and 2017 are compared.

In the regression model of governmental organizations, the variable Welfare is (positively) significant at a 10% significance level and the variables Health (positively) and Size (negatively) are both significant at a 5% significance level. This means that there is empirical evidence that governmental organizations donate more money to an NGO that is focused on health or welfare than another NGO, when the years 2016 and 2017 are compared. This also means that there is empirical evidence that governmental organizations donated less money to big NGOs in comparison to smaller NGOs, when the years 2016 and 2017 are compared.

In the regression model of other NGOs, the variable AuditFirm is (positively) significant at a 1% significance level. This means that there is empirical evidence that other NGOs donate more money to an NGO that is being audited by an external auditor than an NGO that is not, when the years 2016 and 2017 are compared.

In chapter two the expected hypotheses results have been outlined. A positive association between the change in donations and budget variance was expected for donations from private donors, lotteries, governmental organizations and other NGOs. No association was expected between the change in donations from firms and the budget variance. In none of the regression models, the budget variance of the program ratio is a significant variable, which means that none of the types of donors focus on the budget variance of the program ratio before donating money.

Based on the results, the hypotheses explained in chapter two of private donors, lotteries, governmental organizations and other NGOs can be rejected. The hypothesis of firms can be accepted.

5. Conclusion

In this chapter, the main conclusions will be elaborated by mentioning the main research question and its answer. Also, a possible explanation of the answers of the different types of donors will be given. Afterwards the limitations of the research will be given and recommendations for future researches will be proposed.

5.1 Main conclusions

In chapter one, the main research question has been mentioned: 'How do donors react to the reporting quality of Dutch NGOs?' In conclusion, the donors appears not to react to the reporting quality of Dutch NGOs.

In order to come to this conclusion, the main research question was divided into five sub-questions; namely 'How do the different types of donors react to the reporting quality of Dutch NGOs'?' where private donors (1), firms (2), lotteries (3), governmental organizations (4) and other NGOs (5) are the five types of NGOs.

Although it was only expected from firms that they do not react to the reporting quality, empirical evidence shows that none of the types of donors react on it. Therefore, the hypotheses of private donors, lotteries, governmental organizations and other NGOs are rejected, while the hypothesis of firms is accepted.

The private donors were expected to react positively on the budget variance based on researches that used surveys. Therefore, it is possible that private donors focus on other factors when deciding to donate money than they think they do. This could explain the difference between the theoretical and empirical results.

Firms were expected to not react on the budget variance based on Nahr's (2017) results. Therefore there is no difference between the theoretical and empirical results.

Lotteries were expected to react positively on the budget variance because Nationale Postcode Loterij asks NGOs to show them a clear budget if they want to receive a donation. A possible explanation of the difference between the theoretical and empirical results could be that lotteries do not look at how well the budgets were met after the end of the book year.

Governmental organizations were expected to react positively on the budget variance based on certain laws that exclude NGOs for receiving subsidies when their economic feasibility cannot be trusted. A possible explanation of the difference between the theoretical

and empirical results could be that the governmental organizations don't believe the budget variance is an important factor to measure the economic feasibility.

Other NGOs were expected to react positively on the budget variance based on Kimani's (2015) article. A possible explanation of the difference between the theoretical and empirical results could be because of the deficiencies in the article: the sample size was very low and the results were based on a third world country.

In chapter one it was stated that this paper contributes to donors, auditors and NGOS. It contributes to donors in the way that they are aware about the fact that they do not look at the reporting quality of an NGO before donating money. Therefore they also do not know if their donations are spent wisely and if they truly make an impact with their donations. It contributes to auditors in the way that they are aware that they play a less important role for an NGO than (i.e.) for listed companies. However, auditors are very important for NGOs where other NGOs are the most important donors. It contributes to NGOs in the way that if NGOs want to increase their donations, it would not help them significantly to increase the professionality of the financial administration department.

5.2 Limitations

This paper has its limitations, which will be described in this paragraph. First, some of the data has been hand-collected, which is sensitive for errors. Although the hand-collected data is double checked, there could be some errors in it. Second, the sample size is not very large due to the fact that there is a lack of information. Third, some of the NGOs were not audited by an external auditor, what means that the data could be less reliable. Although the control variable AuditFirm partially tackles this limitation, this limitation is not completely tackled. Fourth, the theoretical framework is largely based on what donors think they look at before donating money, what is based on surveys. Because there can be differences between what people think how they act and how they actually do, this is a big deficiency of the theoretical framework. This can possibly explain the difference between the expected and real relationship that has been tested.

5.3 Future research

In this paragraph, recommendations for future research will be given. First, this research could be extended to Europe, instead of only The Netherlands, to increase the sample size and to see how the different countries react to the budget variance. By doing so, the second deficiency will be resolved. Second, a theoretical framework that is based on other variables

could resolve the fourth deficiency if these variables had been tested empirically already (i.e. in another country). Third, CBF could try to find out why donors do not react to the reporting quality. Fourth, the institutional donors (all donors except from private donors) could try to find out why they are donating money without caring about the reporting quality. Fifth, the AFM could conduct research on the role of auditors of NGOs, especially whether auditors should focus more on the non-financial information rather than the financial data.

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