“Having an ANBI status and earnings management: an empirical research on not-for-profit organizations in the Netherlands.”

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Executive Summary

In the Netherlands, it is possible for not-for-profit organizations to obtain an ANBI status, which has several fiscal benefits, but also provides an organization with more rules and regulations. The objectives of this thesis are providing more information about the current situation for Dutch not-for-profit organizations in having an ANBI status and the corresponding incentives for earnings management. The sample of this thesis consists of 2 groups of each 50 organizations: not-for-profit health care organizations and other not-for-profit organizations, during the time-period 2012-2017. The main results of this research are that not-for-profit health care organizations have earnings that are narrowly distributed around zero, which is an indication for earnings management. But, the regression models show that there is no significant association between having an ANBI status and the discretionary accruals. The implications of this results are that it contributes to Dutch policy makers, by showing that the equity limitation rule of ANBI organizations is associated with earnings management, they can take this into account when evaluating their policies. This research also helps external auditors in determining their control strategies and provides more international evidence about the Dutch not-for-profit setting.

Key words: earnings management, not-for-profit organizations, health care, ANBI status
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Chapter 1: Introduction

This thesis is about organizations that have an ANBI status and the effect on earnings management. In this chapter, the concepts ANBI status and earnings management will shortly be introduced. Having an ANBI status can provide incentives to manage the earnings by managers of organizations with that status, because of the specific rules applying to ANBI organizations. Thereafter, the research question will follow. At last, the methods of investigating, the findings and contribution will be described.

1.1 Introduction to the theme

In the Netherlands, under some circumstances, a not-for-profit organization can qualify itself for an ANBI (Algemeen Nut Beogende Instelling) status. There are approximately 43,000 organizations with an ANBI status in the Netherlands (NRC, 2017). Having an ANBI status has several benefits for an organization, for instance it does not have to pay taxes over the money they get from donations (i.e. inheritances and gifts). An ANBI organization has to obey to rules before being able to request an ANBI-status at the Dutch Tax Authority (Belastingdienst). The most important and well known one: the organization has to serve a 90% interest in society (the so-called 90% requirement). Another benefit is that, since these organizations are not-for-profit, they do not have to pay corporate taxes. Therefore, these organizations get a lot of money out of gifts and other beneficence, because that is fiscal more beneficial to people that give their money to these organizations. With this money, the organization must contribute to society and the money that is not used immediately, has to be managed. The board of the organization manages the money and has to make sure the organization contributes to the society for at least 90% of their activities.

Several newspapers have written about fraud in ANBI organizations in the Netherlands. The fraud at ANBI organizations causes that the Dutch Tax Authority (Belastingdienst) will be more cautious towards ANBI organizations. The specific rules for ANBI organizations cause that these organizations have incentives to manage the earnings, which will be described in section 2.1.2.4 more deliberate. One of the most famous examples of this fraud is at the organization of the ‘stichting Noorse Broeders’ (NRC, 2016), this organization misused their ANBI status. They got a lot of gifts, but did not use this money for their community, but engaged in banking activities by providing large loans to their directors, who did not have to pay any interest. Next
to that, the directors used the gifts for their own expenses and not for that of their organization. Another example is an organization in the region of Rotterdam (the article did not provide the name of the organization) which also engaged in fraudulent behavior. They made up fake receipts of their donations, so that their donators can use it for their income tax return, but they did not give that high amounts of donations. The FIOD (the Dutch tax investigation service) denied their status retroactively, which had as a result that everyone who gave money to the foundation must pay taxes for this (AD, 2016).

The laws and regulations in the Netherlands with regards to not-for-profit organizations (NPOs) are not that tight, as mentioned in the Hudson Institute research that looked at the climate for donating to NPOs. This research shows that in the Netherlands, it is very easy to get an ANBI status and there is hardly any control on the application procedure (Hudson Institute, 2015). This can result in non-compliance to rules and regulations at ANBIs. Because the Dutch Tax Authority (Belastingdienst) do not check the compliance of the specific rules of ANBI organizations (NRC, 2017), directors at ANBIs are able to operate on their own and can choose to non-compliance to the rules. But, large amounts of equity or profit can catch the attention of the public and the government. This is a problem, because this is not in line with the characteristics and targets of an ANBI organization per se. Next to that, the “90%-requirement” prescribes that ANBI organizations are not allowed to have large amounts of equity, because ANBI organizations have the target to serve the society, by playing break-even every fiscal year. Having profits and therefore creating large amounts of equity does not fit in this picture. This can cause incentives for fraud for the management of ANBIs, since they do not want to get scrutinized by the public.

Other incentives of managers from ANBI organizations are driven by the fear of losing their ANBI status, because the status has several benefits, as described above. On top of that, there is more and more contractibility, which means that there are more and more rules and regulations for an organization. This can cause that managers want to manage the earnings, since they have more and more pressure to comply to these rules and regulations. Earnings management is then sometimes perceived by the manager to be the last resort. In the end, there is also the fear of public scrutiny. If a not-for-profit organization has a lot of profits it may cause negative attention from the public. By means of earnings management, a manager wants to prevent this from happening.
1.2 Research Question and Relevance

This research will therefore examine the effect of having an ANBI status on earnings management. This will be done by answering the following research question:

“Is having an ANBI status associated with earnings management and earnings quality for Dutch not-for-profit organizations?”

To give an answer to this question, there are some sub questions which will be answered in chapter 2, these sub questions are:

1. How is it possible for not-for-profit organizations to make profit?
2. What is earnings management?
3. What is an ANBI status?
4. What are potential characteristics of an ANBI status which can cause that a manager engages in Earnings Management?

This study contributes to the existing literature because there is not done any research about ANBI organizations and earnings management before, ANBI organizations by definition are not researched that much before. Dutch not-for-profit organizations are researched before, but not that much as not-for-profit organizations from other countries. Prior research focused on not-for-profit organizations and earnings management in the US and the UK. The prior research is conducted at hospitals (Leone & Van Horn, 2005; Jegers, 2010), other health care organizations (Ballantine, Forker, & Greenwood, 2007) and charities (Nguyen & Soobaroyen, 2019; Verbruggen & Christiaens, 2012).

1.3 Methods

This research will be done by investigating the association between having an ANBI status and earnings management, using a regression model. The indicator for earnings management is the discretionary accruals, computed by the Modified Jones model and the indicator for an ANBI status is a dummy variable for whether having an ANBI status or not. The sample consists of 100 not-for-profit organizations in the Netherlands over the period 2013-2017, consisting of two groups, 50 health care organizations and a residual group, consisting of 50 not-for-profit organizations with an ANBI status from other sectors. From each group, approximately 50 percent has an ANBI status. Since prior research is mainly focused at not-for-profit health
care organizations, the sample group will contain of a group with health care organizations and other organizations, since the group of organizations with an ANBI status is highly dispersed.

Previous research focused on earnings management at not-for-profit organizations used the Modified Jones Model extensively. So, this thesis will also use the Modified Jones Model, adapted by Kothari, Leone and Wasley (2005). This will be further explained in the Chapter 4, where the research design of this thesis will be explained.

The data for this research will be collected from the database Orbis, this database contains information from almost all Dutch organizations. Some data is not available at the Orbis database, for instance, whether an organization has an ANBI status or not. For this data, the website of the Dutch Tax Authority (Belastingdienst) is used, they have a website with all organizations who obtained or lost an ANBI status. This website also shows when an organization got the status and when it eventually lost it. The missing values of observations will be hand collected by looking at the financial statements of the different organizations.

1.4 Main Results

The main results of this research are that Dutch not-for-profit health care organizations have earnings that are narrowly distributed around zero, which is an indication for earnings management. But, the regression models show that there is no significant association between having an ANBI status and the discretionary accruals, which are a measurement for earnings management. Having an ANBI status is associated with more volatile earnings and therefore lower earnings quality for other not-for-profit organizations and to less equally distributed earnings and therefore higher earnings quality for not-for-profit health care organizations. The first is in indication for earnings management, since smoother earnings are a sign of earnings management.

1.5 Contribution

This research will contribute to the Dutch policymakers, who can evaluate this research and take the implications in mind when making laws for Dutch not-for-profit organizations. This research can also help external accountants by determining their audit strategies for Dutch not-for-profit organizations. And, this research will contribute to the knowledge about
earnings management in the not-for-profit sector in the Netherlands. At last, this research is
written in English, which contributes to an international understanding of the Dutch setting of
not-for-profit organizations.

1.6 Structure of the thesis

This remainder of the thesis will be structured as follows: first, there will be more explained
about earnings management and the ANBI status itself in Chapter 2: the theoretical and
institutional background. After this, Chapter 3 will give an overview of the relevant empirical
research that has been done in this field before and this will lead to the development of the
hypotheses of this thesis. Chapter 4 will explain the empirical methods that are used in this
thesis, together with the collection and characteristics of the data. Subsequently, Chapter 5
will give the empirical results and an analysis of this results. Chapter 6 will then give the
conclusion of this thesis and describe the limitations and recommendations for further
research.
Chapter 2: Theoretical and Institutional Background

This chapter explains the most important concepts and theories that are used in this thesis, divided in a theoretical and an institutional background. The first part will explain the concept of not-for-profit organizations and their profit-making ability. The second part will explain more about the rules and regulations for organizations with an ANBI status and the ANBI status as a concept. Finally, there will be a summary of the most important information of this chapter which will be used in the next chapter, the hypothesis development.

2.1 Theoretical Background

2.1.1 Not-for-profit organizations and their profit-making ability

Not-for-profit organizations are not targeting at making profit, therefore their budgets are set on break-even. But, it is still possible for a not-for-profit organization to make profit. An organization can also make a loss, which can also be a reason for manipulation of earnings. This will be further explained in section 2.1.2.5. There are several explanations for the profit-making ability of not-for-profit organizations, but the most likely ones will be mentioned here:

1. The organization worked more (less) efficiently compared to their budgets.

When an organization makes their budgets, they make an estimation of the costs they think they will face in the next fiscal year of the organization. Since they are targeted at breaking even in the fiscal year, their costs are in their budgets equal to their revenues. Some not-for-profit organizations have a lot of revenues out of donations by the government or the municipality.

When a not-for-profit organization works more efficiently, they can perform more with the same costs, or the other way around, they need less resources to perform their activities. So, it is for instance possible that the organization spends less money than the amount of the donations, then they can make profit although it is not their main goal. It is also possible that the organization works less efficiently, then they can perform less with the same costs.

2. They got more (less) donations

On the other hand, it is possible that the organization gets more gifts or subsidies. More gifts can cause their earnings to go up when these gifts are given for a special project or purpose.
When the organization performs extra projects and they get more subsidies from the government or municipality to perform this, it is possible that the specific project becomes profitable. This is of course not the main goal of the organization, but it is possible. On the other hand, it is possible that the organization got less donations and therefore faces a loss.

2.1.2 What is earnings management?

2.1.2.1 Definition of earnings management

To research the effect of having an ANBI status on earnings management, it is necessary to determine what earnings management exactly is. As described in the previous section, it is possible for not-for-profit organizations to make profit, reasons for that are working more efficiently or receiving more donations.

Healy and Wahlen (1999) gave a clear definition of what Earnings Management exactly is:

“Earnings management occurs when managers use judgement in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers.”

This definition has several components in it, these components need some explanation. First, the part that managers use judgement means that there are several ways for a manager to exercise judgement in the financial reporting of the company. For instance, the yearly financial statements of the company require estimations for future economic events like the economic lifetime of long-term assets. Next to that, judgement by the manager is required in choosing accounting methods for reporting transactions, like straight-line or double-declining balance depreciation methods.

The line “in structuring transactions” refers to real earnings management. This means that the management manages the earnings by taking (or not taking) real actions. Further explanation about real earnings management can be found in section 2.1.2.3.

Next to that, in the definition, the objective of earnings management is marked as “to either mislead some stakeholders”. This can occur when managers have information that is not available to the public, so it is unlikely that the earnings management is visible for the
stakeholders. Stakeholders at a not-for-profit organization are for instance the municipality and the donators.

Another line from the definition is “to influence contractual outcomes”. Reasons for earnings management may arise from debt, supplier or compensation contracts, further explanation about these incentives and reasons are described in section 2.1.2.4.

On the other hand, it is of course possible that managers also use their accounting judgement in making the financial statements more informative for their stakeholders and other users. This is possible when managers choose accounting policies or estimates that are reliable signs of the organizations’ financial performance.

Management’s use of judgement in financial reporting has potential benefits, but also costs. The benefits exist of potential improvements in the communication of information with the stakeholders outside the organization, as described above. Costs exist of the potential that earnings management can cause misallocation of assets.

There are two ways to manage the earnings, this is by manage the earnings with accruals or with real actions, in the next two sections, these two types will be explained further.

2.1.2.2 Accrual-based Earnings Management

The relation between operating cash flow and earnings is explained by the accrual accounting rules. When we use the equation: net income = operational cash flow + total accruals, we can describe the difference between the operational cash flow and net income as the change in working capital. The working capital exists of for instance inventories, receivables and prepaid expenses minus payables and accrued expenses. Accrual management means that there is a direct effect on earnings and therefore this creates a variation between the operating cash flow and earnings (Lee, Ingram, & Howard, 1999).

2.1.2.3 Real Earnings Management

Lots of managers also manage in performing real earnings management. Real earnings management implies that the manager manages the earnings by taking (or not taking) real actions. For example, the manager cuts R&D expenses and other discretionary expenses. There is evidence that most managers first engage in real earnings management, before engaging in accrual earnings management, that is because real earnings management takes
place during the fiscal year and accrual-based earnings management only can take place afterwards (Black, Christensen, Joo, & Schmardebeck, 2017). Compared to accruals management, real earnings management is harder to detect, since it is difficult to show that a manager for instance did not invest in R&D ‘on purpose’. Black et al. (2017) mention three different measures for real earnings management: abnormal cash from operations, abnormal discretionary expenditures and abnormal inventory production. The first and last measure do not exist for not-for-profit organizations, since most of them do not sell or produce inventory. Next to that, the regression formula of this research already captures the expenses of the organization, so the second measure is not relevant either. Therefore, real earnings management will not be integrated in the calculation for earnings management in this thesis.

2.1.2.4 Reasons and patterns for earnings management

Managers have different reasons for earnings management. In this thesis, there will be made a distinction between two kinds of incentives for not-for-profit organizations: contracting incentives and regulatory incentives.

In the first place, there are contracting incentives. This kind of incentives arise from compensation contracts, debt contracts or supplier contracts. The compensation contract motivations are for instance available in several compensation contracts that exist at these kinds of organizations. Previous research on hospitals in the UK showed that not-for-profit organizations have some extra compensation, but those are smaller than for-profit firms, hence, this incentive is expected to be stronger for profit-organizations (Roomkin & Weisbrod, 1999).

There are also regulatory incentives, this kind of incentives arise from rules and regulations. For instance, organizations can be exposed to potential regulations that are expected to harm them by decreasing their income or increasing their expenses. Those organizations have greater income-decreasing accruals compared to organizations that are not harmed that much by the potential regulation (Key, 1997). These potential regulations can be having an ANBI status, which addresses specific rules and regulations, but also specific rules with regards to subsidies that organizations get from the municipalities. Because, municipalities often state specific rules regarding the spending of the subsidies and the reporting of the expenses.
These two incentives come to life with patterns in which managers manage the earnings, these four patterns are: ‘taking a bath’, income minimization, income maximization and income smoothing.

‘Taking a bath’ means that organizations overstate their charges against income for one time, to reduce assets and therefore reduces future expenses (Sevin & Schroeder, 2005). These one-time losses are mostly associated with a new manager or already a lot of losses in that year. The incentive for a new manager is to blame the old manager for bad performance. The new manager is therefore forced to form provisions for reorganization costs. This gives the new manager the opportunity to realize a better performance later.

Income minimization is less extreme then ‘taking a bath’ but also involves taking losses to lower the earnings in the year. This income minimization is mostly associated with paying lower taxes or it is meant to act relatively invisible (high profits will catch the attention of the public and policymakers, which can cause public scrutiny).

Income maximization is showing an increase in reported earnings. Mostly, incentives for income maximization come from compensation and other contracting reasons.

Income smoothing means that the organization shows lower variability of the earnings over time, this can also be a way to prevent the manager from fluctuations of compensation over time, another reason for this is that people think that investors may invest more in an organizations with a smoother stream of income (Trueman & Titman, 1988)

2.1.2.5 Earnings management at not-for-profit organizations

Since this research consists of a sample of not-for-profit health care organizations and other not-for-profit organizations, this section will make a distinction between earnings management at these two types of not-for-profit organizations.

Health care organizations

Earnings management at not-for-profit health care organizations occurs in two ways. Namely, adjust discretionary spending or use the ‘grey area’ of interpretation of the General Accepted Accounting Principles (GAAP). An example of this ‘grey area’ of interpretation is for some not-for-profit organizations the difference between bad debts and charity. When some debtors delay in paying their bills, a not-for-profit organization may choose to remit this debt and
report this as charity costs. There are no clear rules how this must be accounted for and some organizations misuse this ‘grey area’ (Texas Tech University, 2016).

Leone and Van Horn (2005) stated the ‘zero-profit hypothesis’ which says: “Discretionary accruals are positive (negative) when pre-managed earnings are negative (positive)”.

From the zero-profit hypothesis, it follows that managers at not-for-profit organizations manage the earnings around zero, because that will lower the reporting costs. The reporting costs of not-for-profit hospitals exist of the fear of losing donations and an increase in debt (since the organization has to fill the gap of lower donations), regulation and reputation costs. In the appendix A.1 is a picture attached which shows the different costs of not-for-profit hospitals regarding the reporting of profits (Leone & Van Horn, 2005).

Other not-for-profit organizations

The rationale about earnings management at other not-for-profit organizations is based on the information about charities, since most of the other not-for-profit organizations of the sample of this research are charities.

Managers at charities manage the earnings because they want to improve the efficiency ratio of the organization (this is measured by total money spent on the charitable activities over the total income or expense). A higher efficiency ratio normally implies managerial competence, since the goal of a not-for-profit organization is to get the highest possible efficiency ratio. This higher perceived managerial competence in its way causes an improvement in the organizational reputation, which in term can lead to higher donations.

The incentive of the manager is to report very low fundraising expenses to give the impression that most of the donations are spent on the charitable activity instead of on inefficient fundraising activities (Nguyen & Soobaroyen, 2019).

2.1.3 Agency theory and earnings management

2.1.3.1. The definition of agency theory

The agency theory is one of the most well-known theories in finance and economics. The theory is developed in 1976 by Jensen and Meckling. They explain that the agency theory, which is based on an organization, is regarded as a collection of contracts and agreements. These contracts and agreements show how costs and benefits must be divided among the
different participants in the organization. The participants consist of two types: principals (owners) and agents (directors) of the organization (Jensen & Meckling, 1976). These two persons have an agency relationship.

The problem with agent and principal relationships is that the principal cannot see all the things the agent does. Because the agents have direct access to inside information about the organization and the principals do not have this, there should be goal congruence to make sure that both parties act in favor of the same goal. To make sure that there is goal congruence, organization try to establish efficient contracts between agents and principals (Jensen & Meckling, 1976).

2.1.3.2. Agency theory in the not-for-profit sector

Within the not-for-profit sector, different principal-agent relations can be recognized (Puyvelde, Stijn, Caers, du Bois, & Jegers, 2012):

- Donors or members as principal and management as agent;
- Other organizations (policy makers for instance) as principal and management as agent;
- The board as principal and management as agent;
- Management as principal and employees as agent.

Puyvelde et al. (2012) make a distinction between internal principal-agent relations and external relations. The first two relations described above can be marked as external, that are relations outside the organization. The last two relations can be described as internal, that are relations within the organization. A not-for-profit organization has to meet the expectations of donors and members plus the expectations of other organizations, like the government. (Puyvelde, Stijn, Caers, du Bois, & Jegers, 2012).

2.1.3.3. Agency theory and earnings management in the not-for-profit sector

Since there is no prior research regarding all these three concepts together, this section will be written using knowledge obtained by combining prior research.

As written in sections 2.1.2.4 and 2.1.2.5, managers want to improve the efficiency ratio and want to comply with the ‘zero-profit hypothesis’. Next to that, there are regulatory incentives
for not-for-profit organizations with an ANBI-status, since these organizations encounter several extra rules and regulations.

Linking these incentives to the agency theory, shows that the ‘external relations’ are influenced by these incentives. There are two relations observed: The donors or members are principal, and the management is the agent and other organizations (policy makers for instance) as principal and management as agent. When a manager wants to improve the efficiency ratio or want to comply with the ‘zero-profit’ hypothesis, he aims for pleasing the donors or members of the organization. This opposes a conflict, since the manager himself does not want to report zero profit per se, but he thinks he is forced to do so by the donators and members.

Next to that, the regulatory incentives are related to the relationship with other organizations (policy makers for instance), since the manager does not want to disappoint them, and the manager wants to comply to rules and regulation. This also opposes a conflict, since the manager wants to comply to rules and regulations, but only if these are favorable for him, but not all rules and regulations will be favorable. A manager does not really want to comply to rules that are unfavorable for the organization, since this can have negative consequences for the organization. But, he will make it look like he does comply, since he fears the reprisals of the policy makers.

2.2 Institutional Background

2.2.1 What is an ANBI status and which laws and regulations are there?

ANBI stands for ‘Algemeen Nut Beogende Instelling’ (Belastingdienst, 2019b), in English this can be stated as: Organization for public benefit. Not-for-profit organizations can, when they obey to specific rules and regulations, apply for an ANBI status at the Belastingdienst. When a not-for-profit organization applies for this status, the Belastingdienst is going to find out if the organization obeys to all the specific rules and regulations, if they do so, the organization gets an ANBI status. All not-for-profit organizations can apply for an ANBI status (if they comply with the specific rules), this results in an enormous diversity within the group of organizations with an ANBI status, there are charities, health care organizations, schools and other not-for-profit organizations amongst the group.
The concept of the ANBI status was introduced in 2008; it is possible to register for an ANBI status since 1 January 2008. Firstly, the “90%-requirement” was just a “50%-requirement”, so the organizations with an ANBI status only had to serve the society with 50 percent of their activities. In 2010, this percentage is raised to the current 90 percent. At 1 January 2014 the rules regarding ANBI organizations changed for the last time, this change contained that ANBI organizations have to be more transparent regarding publicizing information. So, now organizations with an ANBI status have to publish information at their own website, this is mostly information about the board of the organization and regarding the financial statements.

The laws and regulations for organizations that want (to keep) an ANBI status are described in the “Algemene wet inzake rijksbelastingen, hoofdstuk 1, artikel 5b” (Overheid, 2019). These rules and regulations are described in Appendix A.2.

When an organization does not comply to one of these rules any more, it has to give up their ANBI status, but because of the benefits of an ANBI status, organizations do not want to lose their status. The benefits of an ANBI status are (Belastingdienst, 2019c):

- The organization does not have to pay taxes on inherits and other gifts, if they use this money for the public benefit.
- If an organization with an ANBI status itself donates money for the public benefit, the receiving organization also does not have to pay taxes over this money.
- An ANBI organization gets refund for energy taxes.
- Volunteers who work for ANBI organizations can under some circumstances see their work as a gift, which gives them tax benefits.
- People who give money to organizations with an ANBI status can subtract these gifts from their income taxes.

As mentioned in the introduction, because of the lack of inspectors at the Belastingdienst (NRC, 2017), a lot of organizations can engage in not complying to the rules (in more or less known ways). When an organization does not comply with all the rules set up by the Belastingdienst, they are acting against the law. This is because they have an ANBI status when they do not have the rights to have one.
2.2.2 Which regulations can cause earnings management?

There are two rules of organizations with an ANBI status which can cause incentives for earnings management: these are the equity limitation and the reasonable proportion between expenses and spending. These two incentives can lead to earnings management because of the following reasons:

The equity limitation limits the organization in creating large amounts of equity. The creating of equity happens most of the times when there is a profit, therefore the manager has an incentive to manage the profit downwards. Because, after all, he does not want to lose the ANBI status. Managing the profit downwards is not part of the non-discretionary accruals, since the non-discretionary accruals are non-avoidable expenses and earnings management is not part of this. Therefore, it is part of the discretionary accruals, which is the measure for earnings management in this research. The different kind of accruals will be further explained in chapter 4.

The reasonable proportion between expenses and spending can cause incentives for earnings management because it restricts the manager in the amount of expenses and income. Because the manager is limited in a proportion between expenses and spending and since spending is mostly fixed, the manager has incentives to shift costs. This can cause that the manager wants to shift costs to a next year or wants to expense costs before they take place. This causes that the manager has an incentive to manage the profit down- or upwards.

2.2.3 Situations in the United States and The Netherlands

2.2.3.1. The United States

Since lots of research regarded not-for-profit organizations in the United States, for instance Eldenburg et al. (2001) and Leone and Van Horn (2005), this section will explain the situation for not-for-profit organizations there. The ANBI status for not-for-profit organizations is not unique in the world. In the United States, there are similar situations for not-for-profit organizations. It is possible for a not-for-profit organization to opt for an exemption of property taxes, which is different from The Netherlands. The regulations that the not-for-profit organizations have to obey are recorded in section 501c of the ‘Internal Revenue Code’ (the federal statutory tax law in the United States). The rules for these organizations are similar to those for organizations with an ANBI status. For instance, the organizations have to
perform their activities to support the targets stated in the Internal Revenue Code (Legal Information Institute, 2019). Next to that, the equity of the organization must be separable from the directors, just like the ANBI status’ regulations prescribe in the Netherlands. Also, activities that are focused on personal benefit and not on the benefit of the community are prohibited.

In the Netherlands, organizations with an ANBI-status have the obligation to publish financial and general information, as described above and in the next section. In the United States, not-for-profit organization that are exempt from taxes must fill in an extensive declaration every year, the so-called ‘form 990’. In this declaration, they have to publish general information about the organization, but also financial information. The rules and regulations are also based on the Financial Accounting Standards Board (FASB), the organization that determines the general reporting standards in the United States. This information on this form is more detailed compared to the publication requirements in the Netherlands for organization with van ANBI status.

2.2.3.2. The Netherlands

In the Netherlands, the ‘Raad voor Jaarverslaggeving’ (RJ) describes the guidelines for the way in which organizations in the Netherlands have to present their financial information in the financial statements. These guidelines are called the ‘RJ-guidelines’. There are four types of ‘RJ-guidelines’ for not-for-profit organizations in the Netherlands: RJ640, RJ650, RJk C1 and RJk C2. In short, the RJ640 guidelines prescribe the financial reporting for not-for-profit organizations in general. The RJ650, RJk C1 and RJk C2 depict the financial reporting standards for charities, of which RJ650 (revenues above 12 million euros) applies to the biggest charities and RJk C2 (revenues until 500.000 euros) to the smallest.

This thesis will be amongst others focused at charities, so the RJk C1, C2 and RJ650 are the most relevant guidelines. As described in section 2.2.2., the components of the financial statements that are the most sensitive for earnings management are the equity and the expenses of the organization. In practice, most charities have chosen to report conform the RJk C1-guidelines, since most not-for-profit organizations in The Netherlands fall within this group. The ‘RJ-guidelines’ described in RJk C1 (‘the in-between group’) regarding these line items are as follows (Raad voor de Jaarverslaggeving, 2016):
- Regarding their equity: The organization has to present which part of their equity is freely disposable and which part is not. Next to that, they have to present which part of their equity is earmarked. Earmarked means that the organization or donator has made a special purpose for this money and therefore the money has to be spent on this special purpose. This can for example be a new IT-system.

- Regarding the expenses: the organization has to publish the amount of expenses that are spent on their board, like the expenses for their meetings, but also for example for their pensions. The organization also has to publish conform the WNT-rules (Wet Normering Topsalarissen). This means that they have to publish the salary of their managers and the auditor has to make sure that the salary of the managers is not above the WNT-border (this border is 194.000 euros in 2019) (Belastingdienst, 2019d). This WNT-border means that people working in the public domain may not earn more than the prime minister of the Netherlands. Next to this, the organization has to also publish the spending regarding their main activities.

So, the auditor has to focus himself on the equity and the expenses of an organization with an ANBI-status when performing an audit.

2.3 Summary

In this section, the concepts that are mentioned in this chapter which are important for the following parts of this thesis are summarized.

Two explanations for why not-for-profit organizations are able to make profits (losses) are that they worked more (less) efficiently compared to their budgets or that they got more (less) donations.

The definition of earnings management shows that managers use judgement by choosing accounting policies, can perform real earnings management, want to hide information from the public or want to influence contractual outcomes. This can be done in two ways: manage the earnings with accruals or with real actions.

Prior research showed that earnings management at health care organizations comes from the will to comply with the ‘zero-profit hypothesis’ (Leone & Van Horn, 2005) and that other not-for-profit organization aim at improving their efficiency ratio (Nguyen & Soobaroyen,
This gives incentives for managers of not-for-profit organizations to manage the earnings by reporting low fundraising costs, to improve their efficiency ratio.

The agency theory shows that managers at not-for-profit organizations have incentives to manage the earnings, since their agency relationships can give them incentives for this earnings management. Donators and members of the organization expect that they have zero-profit, meanwhile the manager does not really want to manage the earnings. Policymakers want the organization to comply to all kind of rules and regulations, but when these are unfavorable for the organization, because they for instance lower the donations or increase the expenses, the manager does not really want to. Unfavorable rules and regulations can cause that the profit of the organizations goes down. But, since managers want to comply with the “zero-profit hypothesis”, they will manage the profit in a way it will be closely around zero.

The ANBI status stands for: Organization for public benefit. Organizations longing for a status have to comply with eleven rules. These are described in Appendix A.2. The most important rules require the organization that they have to spend 90% of their expenditures to contribute to society and they have to publish a lot of information and therefore be very transparent.

In the United States there is a similar status for organizations, but to obtain this status, an organization has to obey to rules that are stricter, compared to the Netherlands. These rules are written in section 501c of the ‘Internal Revenue Code’.

Next to the ANBI rules and regulations, there are some standard guidelines regarding reporting financial information in the Netherlands, this are the ‘RJ-guidelines’. These guidelines are important regarding the equity and expenses of the organizations with an ANBI status, since the earnings management is most likely to occur at these line items of the financial statements. The organization has to publish which part of their equity is freely disposable and which part is not. Next to that, they have to publish which part of their equity is earmarked. The organization has to publish the amount of expenses that are spent on their board, like the expenses for their meetings, and next to that, the organization also has to publish conform the WNT-rules, which mean that their managers are not allowed to earn more salary then the prime minister of the Netherlands. Next to that, they have to publish their spending reading their main activities.
Chapter 3: Literature review and hypothesis development

3.1 Introduction

In this chapter, the hypotheses of this research will be developed by examining previous studies that have researched the concepts of this study. Next to that, previous literature about earnings management at not-for-profit organizations will be reviewed, divided in two sections, health care organizations and other not-for-profit organizations, since this research looks at these two groups separately. An overview of papers that are mentioned in this chapter can be found in Appendix A.4, which summarizes the most important points of these papers.

3.2 Not-for-profit healthcare organizations

3.2.1. Literature Review

As already mentioned in section 2.1.2.5, Leone and Van Horn (2005) researched earnings management at not-for-profit hospitals in the United States. Their sample consists of 1024 hospitals for the period of 1990 until 2002. They use a self-designed model for earnings management, but as a robustness check, they performed their analysis also by using the Modified Jones Model. In this model, earnings management is measured by the discretionary accruals, income of the previous period is their independent variable and their most important control variables are leverage, size and year. Their findings show that CEOs of not-for-profit hospitals manage the earnings to a number around zero (in consensus with the zero-profit hypothesis), because this lowers the reporting costs showed in Figure A.1.1. in the Appendix A.1 (debt, reputation, regulation and lost-donation costs). When a manager reports a profit below zero, there will be higher reporting costs, since this will harm the reputation of the manager. People think that the manager is not capable of his or her job. When a manager reports a (high) profit, there will also be higher reporting costs, since the organization has to fear for lost donations. People give lower donations to organizations that make lots of profits.

Eldenburg, Gunny, Hee and Soderstrom (2011) investigate both core and non-core activities of hospitals in the United States. They researched 95 hospitals for the period 1998 until 2003, using a model designed by themselves using year clustering. They measure earnings management by the change in non-operating revenue from t-1 to t, deflated by assets. They
find that managers of not-for-profit hospitals engage in real earnings management to meet benchmarks by expenditure manipulation and asset manipulation. Asset manipulation can be committed by fixed asset dispositions. Expenditure manipulation consists of the changes in expenditures, by increasing one-time expenditures like advertising or governing board costs. The expenditure manipulation is the most relevant for this research. Inspired by Leone and Van Horn (2005), their own contribution was that they find “that hospitals with stronger incentives to manage earnings upward experience significantly larger reductions in expenditures in non-revenue-generating and non-operating activities” (Eldenburg, Gunny, Hee, & Soderstrom, 2011). As described above, they find that the management of hospitals manages the earnings by making more costs on one-time expenditures in non-core activities. Since these costs are most manageable.

Other research on not-for-profit health care organizations (Tan, 2011; Ballantine, Forker, & Greenwood, 2007) also looked at earnings management. Tan (2011) researched earnings management at not-for-profit hospitals in Taiwan, using 150 firm-year observations for the period 2006-2008. He uses the Modified Jones Model and therefore measures earnings management using the discretionary accruals. Ballantine et al. (2007) researched not-for-profit hospital trusts in England, using 1372 firm-year observations for the period 1998-2004. The researchers use the Dechow and Dichev-model, where the dependent variable is the change in working capital accruals. The conclusions of these two researches are the same, their most important findings are that not-for-profit health care organizations manage the earnings around zero. Next to that, Ballantine et al. (2007) find also that the earnings of these kind of organizations are narrowly distributed around zero. This view is supported by Leone and van Horn (2005).

3.2.2. Hypothesis Development

The previously mentioned researches contributed to the development of the hypotheses that are tested in this thesis. Their findings are a guideline for this thesis and will also be tested. The hypothesis regarding the not-for-profit health care organizations will be as follows:

\[ H_1: \text{Not-for-profit health care organizations’ earnings are narrowly distributed around zero.} \]
Next to this hypothesis, I test the hypothesis that having an ANBI status impacts the earnings management of a not-for-profit health care organization. This is already mentioned in section 2.2.2. Therefore, the last hypothesis regarding this kind of organizations will be:

\[H_2: \text{Not-for-profit health care organizations with an ANBI status engage in earnings management.}\]

3.3 Other not-for-profit Organizations

3.3.1. Literature Review

In section 2.1.2.5., the research of Nguyen et al. (2019) is mentioned. This research looks at charities with a minimum income of 500,000 pounds in the United Kingdom for the six-year period 2007 until 2012. The researchers investigate whether the earnings of UK charities are narrowly distributed around zero, this is in line with earlier research. Next to that, the researchers examine whether UK charities manage earnings around zero, by using the Jones model for computing discretionary accruals. Important control variables of this research are leverage, size and discretionary accruals of the previous period. Their last hypothesis was stated that the leverage of the charities is significantly associated with the extent of earnings management.

The findings of this research are that the earnings are nearly distributed among zero, with more positive than negative profits. Next to that, managers engage in tactics to manage the discretionary accruals in a way that the profits of charities will be managed up- or downwards to zero. They also show an association between leverage and discretionary accruals. This means that charities with a lot of debt are more likely to involve in earnings management. One in eight of the largest charities of the UK have a negative working capital and therefore, they have to disclose more information in their annual report regarding this negative working capital. This negative working capital is related to the amount of debt of charities and this large amount of debts is amongst others created by the hard time in fundraising by UK charities (Nguyen & Soobaroyen, 2019).

Verbruggen and Christiaens (2012) also examined earnings management at not-for-profit organizations. They look at 841 Belgian not-for-profit organizations for the years 2006-2008. They perform their regressions using the Jones model with discretionary accruals as the dependent variable. They find that Belgian not-for-profit organizations manage earnings
downwards if they are positive and next to that, they find that the reported earnings are narrower distributed around zero, compared to the unmanaged earnings (earnings before discretionary accruals or EBDA).

Kuroki (2019) researches Japanese Private Colleges and Universities for the time-period 2009-2013. He uses the Burghstaler and Dichev model (1997), which looks at the earnings changes distribution of organizations by trying to detect a “kink” in the distribution around zero. Next to that, Tan performs a probit regression with as dependent variable the chance of having positive earnings before capital expenditures. He uses change in assets and cash flow, size and year as control variables. His conclusions are that Japanese Private Colleges and Universities manage the earnings downwards, his findings are consistent with the findings of Leone and van Horn (2005), who finds the same results on a population of not-for-profit hospitals, as described in section 3.2.1.

Beisland and Mersland (2014) look at the earnings quality, instead of only at earnings management. They research the microfinance industry from 73 different countries and compare not-for-profit organizations with for-profit organizations. As a part of earnings quality, they measure earnings management. They measure earnings management in three ways: the standard deviation of the change in earnings; small profit frequency and large loss frequency. Their overall findings are that there are no or minor differences in general earnings quality when one compares not-for-profit organizations with for-profit organizations. The researches did not use a specific model for earnings management but used easy metrics and their findings are that not-for-profit organizations engage more in earnings management than for-profit organizations in the same microfinance industry.

The earnings quality of the not-for-profit organizations in this research will be further mentioned in the next chapter and will be explained in chapter 4 and tested in the additional section of the results section of this thesis.

3.3.2. Hypothesis Development

The previously mentioned researches contributed to the development of the hypotheses that are tested in this thesis. Their findings are a guideline for this thesis and will also be tested. The hypothesis regarding the other not-for-profit will be as follows:

$H_3$: Other not-for-profit organizations’ earnings are narrowly distributed around zero.
Next to this hypothesis, I also test the hypothesis that having an ANBI status impacts the earnings management of other not-for-profit organizations. This is already mentioned in section 2.2.2. Therefore, the last hypothesis regarding this kind of organizations will be:

\[ H_4: \text{Other not-for-profit organizations with an ANBI status engage in earnings management.} \]

### 3.4 Conclusion

In this conclusion, the hypotheses that will be researched in the further act of this thesis will be mentioned.

The hypotheses that will be researched in this thesis are stated as follows:

\[ H_1: \text{Not-for-profit health care organizations’ earnings are narrowly distributed around zero.} \]

\[ H_2: \text{Not-for-profit health care organizations with an ANBI status engage in earnings management.} \]

\[ H_3: \text{Other not-for-profit organizations’ earnings are narrowly distributed around zero.} \]

\[ H_4: \text{Other not-for-profit organizations with an ANBI status engage in earnings management.} \]

How these hypotheses will be tested will be further explained in the next chapter, which explains more about the research methodology and data used in this thesis.
Chapter 4: Research design and data

4.1 Introduction

This chapter describes the research design, sample and dataset of this thesis. First, the regression equation is mentioned. After that, other tests, dependent variable, independent variable, control variables of the research design are explained and afterwards, the sample and data will be discussed.

4.2 The regression equation

The concepts of this study and the operationalization of these concepts are available in the predictive validity framework in Appendix A.1. The predictive validity framework is designed by Libby (1981). The framework shows the relations between independent and dependent variables and the concepts and their operational measures. Validity can be divided in three kinds, internal, external and construct validity. When evaluating the internal validity of a research, the question “is the research done right?” rises, this is reflected by line number (1) in the predictive validity framework. This question means that the research captures the effect that is projected to be measured. Next to internal validity, there is external validity. The external validity of a research means that the results of this research are applicable to another sample outside the context of this study. In other words, it is the extent to which the results of this research are generalizable across another sample. Construct validity means that the research captures what it claims to measure.

The effect of having an ANBI status on earnings management will be measured by the following regression equation:

\[ DAC = \beta_0 + \beta_1 ANBI + \beta_2 SIZE + \beta_3 LOSS + \beta_4 BIG4 + \beta_5 EQUITY + \beta_6 EXPENSES + \beta_7 - 10 \cdot YEAR + \epsilon \]

This regression equation will be used to answer hypotheses 2 and 4. A variable description table can be found in Appendix A.3.

Next to this regression, other tests are performed in this research, there will be made some histograms of the division of earnings, to look at the distribution of earnings around zero to test hypotheses 1 and 3. Next to that, the significance of the distribution around zero will be tested by using a two-sided t-test. This test investigates whether the earnings are significantly
different from zero or not. As an explanation for earnings management, Eldenburg, Gunny, Hee and Soderstrom (2011) looked at sales change, but in the context of this research, earnings (change) is more explanatory for earnings management, since the not-for-profit organizations of the sample don’t sell products. When the earnings distribution is narrowly distributed around zero, this is an indicator for earnings management, since smoothness of earnings is one of the goals of the managers of not-for-profit organizations (as mentioned in section 2.1.2.4). This test will be performed apart from the regression equation to give a first indication for earnings management.

4.3 Other tests

Earnings management is one proxy for earnings quality, but there are other proxies for earnings quality. Next to the abovementioned tests, there will be performed some other tests to look at other proxies for earnings quality of not-for-profit organizations in the Netherlands. For these tests, the research of Beitland and Mersland (2014) is used as the starting point. Other proxies for earnings quality are the smoothness, predictability and persistence of earnings. The smoothness of earnings is tested in this research as a robustness check of the results. The smoothness of earnings will be measured by the standard deviation of earnings. Then, the standard deviations of the group of organizations with and without an ANBI status will be tested using a F-test for differences in standard deviations between groups. This is to test whether the standard deviations of each group are significantly different from each other. Prior literature showed that earnings with higher volatility have lower quality (Dechow, Ge, & Schrand, 2010). These tests will be performed to support the findings and will be performed in the additional section of the results of this research.

4.4 The dependent variable, DAC

The dependent variable of the regression equation is DAC, a proxy for earnings management, computed by the Modified Jones model. Prior research used this model frequently (Tan, 2011; Leone & Van Horn, 2005; Nguyen & Soobaroyen, 2019; Verbruggen & Christiaens, 2012), next to that, section 2.1.1 described the profit-making ability of not-for-profit organizations, so therefore the model is applicable for this research.

The Modified Jones model that is used in this research is designed by Kothari, Leone and Washley (2005), and is a refinement of the model of Dechow, Sloan and Sweeney (1995). One
of the refinements is that they added the return on assets into the calculation of the total and
non-discretionary accruals. They incorporated the return on assets in their estimation for the
total and non-discretionary accruals because it controls for the size of different organizations.
And, since organizations differ in performance, it needs to be controlled for.

The model of Dechow et al. (1995) is a refinement of the 'basic Jones model' (designed by
Jones (1991), one of their refinements is to just only look at cash sales, instead of all sales. This
is because when the change in revenue is totally incorporated in the estimation of non-
discretionary accruals, so, the earnings management will not be detected. The thoughts
behind this change are that earnings are easier manageable via credit then via cash sales.

The Modified Jones model measures earnings management in three steps. The first step is
determining the total accruals ratio per organization. This is calculated by the following
formula, which measures the long term and working capital accruals, divided by total assets
in order to estimate the firm-specific coefficients $a_1 - a_4$, which are needed to compute the
non-discretionary accruals for step two.

$$\frac{TA_t}{A_{t-1}} = a_1 \left(\frac{1}{A_{t-1}}\right) + a_2 \left(\frac{\Delta REV_t}{A_{t-1}}\right) + a_3 \left(\frac{PPE_t}{A_{t-1}}\right) + a_4 \text{ROA}_t + e_t \quad (1)$$

Where:

- $TA_t$ = Total accruals at t
- $A_{t-1}$ = Lagged total assets
- $\Delta \text{REV}_t$ = Revenue Change: Revenues in year t minus revenues in year t-1
- $PPE_t$ = Gross property, plant and equipment in year t
- $\text{ROA}_t$ = Return on assets in year t
- $a_1, a_2, a_3, a_4$ = Firm-specific coefficient estimates
- $e_t$ = Error term

The determinants of the accruals are all scaled by total assets and exists of (1) Change in
Revenue ($\Delta \text{REV}$), which measures activity and also intended to capture working capital items
(2) The level of gross Property, Plant and Equipment ($PPE$), which is intended to capture long
term accruals, such as depreciation. In the last place (3) Return on Assets (ROA), is included in
the calculation, because it controls for the performance of the organization.
The second step is to determine the non-discretionary accruals, these are estimated by the following formula. This formula calculates an expectation for the accruals per sector, based on the earlier calculated coefficients in formula (1). When the accruals are at the expected level, there will be no earnings management observable, because then the total accruals will be equal to the non-discretionary accruals.

\[ NDA_t = \hat{a}_1 \left( \frac{1}{A_{t-1}} \right) + \hat{a}_2 \left( \frac{\Delta REV_t - \Delta REC_t}{A_{t-1}} \right) + \hat{a}_3 \left( \frac{PPE_t}{A_{t-1}} \right) + \hat{a}_4 \text{ROA}_t \]  

(2)

Where:

- \( NDA_t \) = Estimated non-discretionary accruals at \( t \)
- \( A_{t-1} \) = Lagged total assets
- \( \Delta REV_t \) = Revenue change: Revenues in year \( t \) minus revenues in year \( t-1 \)
- \( \Delta REC_t \) = Receivables change: Net receivables in year \( t \) minus net receivables in year \( t-1 \)
- \( PPE_t \) = Gross property, plant and equipment in year \( t \)
- \( \text{ROA}_t \) = Return on assets in year \( t \)
- \( \hat{a}_1, \hat{a}_2, \hat{a}_3, \hat{a}_4 \) = Firm-specific coefficient estimates measured in formula (1)

At second part of the fourfold equation, one can see that there is adjusted for the credit sales \( (\Delta REC) \), this is mentioned above and is done because of the earnings that are easier manageable via credit sales compared to cash sales.

The third step is to calculate the discretionary accruals, this is be done by the next formula:

\[ DA_t = TA_t - NDA_t \]  

(3)

Where:

- \( NDA_t \) = Estimated non-discretionary accruals at \( t \)
- \( TA_t \) = Total accruals at \( t \)
- \( DA_t \) = Discretionary accruals at \( t \)

This last formula measures the discretionary accruals ratio, which is a proxy for earnings management. When this ratio is analyzed, it can be approached in four ways: looking at the positive ratios, the negative ratios, the absolute value of the ratios and the sign of the ratios.
The next chapter will analyze the absolute and signed discretionary accruals in the results section. The discretionary accruals ratio is a sign of earnings management, because there are more (less) accruals then expected following the non-discretionary accruals formula.

4.5 The independent variable, ANBI

The operationalization of the ANBI status of an organization will be a dummy variable, named ANBI, which has the value 1 for organizations with that status and 0 for organizations that do not have that status.

Having an ANBI status provides the management incentives for earnings management, therefore, a positive association is expected between ANBI and DAC.

The data of the ANBI status is hand collected from the website of the ‘Belastingdienst’, at this website, there is information available of the data of obtaining and losing a status.

4.6 The control variables

This thesis uses several control variables, which will be mentioned and described in this section. It is important to isolate the effect of the ANBI status of not-for-profit organizations with regards to endogeneity problems, therefore, there will be some control variables added to the regression.

The control variables used in this research are:

- **SIZE**: computed by the natural logarithm of total assets.

There will be controlled for the size of the organization, this will be done by using the natural logarithm of the assets. This variable is included because it controls for the size of the organizations, since this can affect the amount of earnings management. This variable will be known as SIZE in the regression. Larger organizations can engage easier in earnings management, since they have more opportunities to do so. The expectation is that larger organizations engage in more earnings management. So, the variable SIZE will have a positive coefficient. Next to that, having an ANBI status can affect the size of an organization, since more donations can cause the organization to grow because of more financial resources. Other earlier mentioned researches use this variable also as a control variable (Eldenburg, Gunny, Hee, & Soderstrom, 2011; Tan, 2011; Kuroki, 2019; Nguyen & Soobaroyen, 2019). The
data for this variable will be collected from the database of ORBIS, and, if not available, collected by hand by checking the financial statements of the organization.

- **LOSS: dummy variable with 1 for loss and 0 for profit during the fiscal year**

The variable LOSS is a dummy variable that equals 1 if the organization has a loss and equals 0 if the organization has a profit during the year. As mentioned in chapter three, having a loss causes incentives for management to manage the earnings, since they want to comply to the “zero-profit hypothesis”. An ANBI status is correlated with having a loss, since organizations have incentives to avoid losses when they have an ANBI status. Having a loss provides the management incentives for managing the earnings upwards, therefore, a positive association is expected between LOSS and DAC. Leone and van Horn (2005) took this variable also into consideration in their research, which shows that organizations with a profit will manage the profit downwards and organizations with a loss will manage the profit upwards. The data regarding the profit of the organizations is retrieved from the Orbis database, but the dummy variable is created during the analytical procedures of this thesis.

- **BIG4: dummy variable with 1 for a Big 4 auditor and 0 if not**

BIG4 is a dummy variable that is equal to 1 if the organization is audited by a BIG4 company and equal to 0 if that is not the case. Big-4 auditors have a large reputation and next to that, earlier research on expense misreporting (Krishnan, Yetman, & Yetman, 2006) at not-for-profit organizations showed that not-for-profit organizations audited by BIG4 companies have a more reliable expense reporting. Having an BIG4-auditor causes that the expenses of the organizations are more reliable and therefore it is expected that organizations with a BIG4-auditor have less incentives for earnings management. Next to that, having an ANBI status influences having a BIG4 auditor, since ANBI organizations want to show that they are more reliable, they can use a BIG4 auditor to audit the financial statements. Because the status of a BIG4 auditor, this can secure donators to give to an organization audited by a BIG4 auditor, instead of a non BIG4 audited organization. The data regarding the auditor is obtained from the Orbis database, where there is data available about who the auditor is, then, there is manually created a dummy variable by looking at the auditor’s name and therefore classifying them in BIG4 or non BIG4.
- **i. YEAR: fixed effects for the different years of observations**

Because the database of this thesis contains panel data, there needs to be controlled for the different years of observations, since each year can have their own characteristics and a different economic situation. This can influence earnings management, since for instance in a time of financial distress, there are incentives to manage the earnings upwards and in time of financial progress, there will be incentives to manage the earnings downwards. Next to that, having an ANBI status is correlated with a year, because the characteristics (financial distress for instance) of that year can provide incentives for managers to obtain an ANBI status. This control variable is widely used in previous researches (Eldenburg, Gunny, Hee, & Soderstrom, 2011; Tan, 2011; Kuroki, 2019). Previous research uses this variable to control for the effects of the different years in the regression.

- **EQUITY: dummy variable which is 1 if the organization is in the highest 50 percent of the organizations regarding the equity-to-assets-ratio**

As mentioned in section 2.2.2, the rules and regulations of organizations with an ANBI status provide incentives for managers to manage the earnings up- or downwards to comply to the rule that their amount of equity should be limited to a ‘reasonable’ level (see Appendix A.2). Therefore, I designed the control variable EQUITY, since this incentive should be included in the regression. The ratio equity-to-assets will be calculated, since this should provide a reliable proxy for the equity creation of the different organizations, considering it controls for the size of organizations (measured by assets). When this ratio is created, the mean of the different ratios of the organizations in the samples will be calculated and afterwards will be divided in two classes: the highest and lowest 50 percent of the sample. Therefore, there will be created two groups, one with higher incentives and one with lower incentives. If the organization is amongst the highest 50-percent-group, the dummy variable will be 1, otherwise it will be zero. Organizations with more equity in relation to their assets have more incentives for earnings management, since they want to obey to the rule of their equity limitation. The data for this variable is collected from the Orbis database, but the dummy variable is created during the analytical procedures of this thesis.
- **EXPENSES**: dummy variable which is 1 if the organization is in the highest 50 percent of the organizations regarding the natural logarithm of total expenses

Next to the abovementioned incentive, there is another incentive for managers of organizations with an ANBI status, namely the reasonable proportion between expenses and spending (see Appendix A.1). It is difficult to create a control variable for this incentive, with regards to the available data, since the spending of the organizations is not available. Therefore, the natural logarithm of the expenses is incorporated to control for the size of the organizations and to control for the incentive to manage the expenses in the regression of this thesis. The effect of this incentive is ambiguous, since on the one hand, more expenses in relation to size means that the organization has more expenses and so more opportunities to manage the earnings, since it is less likely to be noticed. But, on the other hand, less expenses at for instance a smaller organization give an opportunity for the manager to manage the earnings downwards by making extra costs in non-core activities, for instance marketing. The data regarding this variable is collected from the Orbis database, but the dummy variable is created during the analytical procedures of this thesis.

The variables EQUITY and EXPENSES are dummy variable which can also be seen as proxies for earnings management. But, these dummies are incorporated as control variables in this research, since these variables are more regarded as incentives then as proxies for earnings management. Since these variables are proxies for the incentives, caused by the regulations for organizations with an ANBI status, it is sufficient to take them into account by incorporating them as control variables.

**4.7 The sample and data**

*Sample Selection*

The sample consists of 100 not-for-profit organizations in the Netherlands over the period 2013-2017, consisting of two groups, 50 health care organizations and a residual group, consisting of 50 not-for-profit organizations with an ANBI status from other sectors. From each group, 50 percent of the organizations has an ANBI status. Since past research is mainly focused on not-profit health care organizations and other not-for-profit organizations and the organizations with an ANBI status are highly dispersed, the sample of this research consists of 4 groups:
1. Other not-for-profit organizations with an ANBI status
2. Other not-for-profit organizations without an ANBI status
3. Not-for-profit health care organizations with an ANBI status
4. Not-for-profit health care organizations without an ANBI status.

As described above, each group consists of 25 organizations.

The first export from the database of Orbis contained 98 organizations, but, after checking the observations on completeness, it turned out that 36 organizations had no complete data and after determination that the data was not available for collecting by hand, these organizations were dropped from the sample. After this, renewing search criteria by searching on availability of revenue data instead of cash flow data, new organizations became available for the sample. Of these organizations, 38 were randomly selected for the sample, to come to a total of 100 organizations, equally divided over the four groups. In the table below, the sample selection process is showed.

<table>
<thead>
<tr>
<th>Group</th>
<th>1 (ANBI = 1, HC = 0)</th>
<th>2 (ANBI = 0; HC = 0)</th>
<th>3 (ANBI = 1; HC = 1)</th>
<th>4 (ANBI = 0; HC = 1)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizations from first database</td>
<td>22</td>
<td>20</td>
<td>0</td>
<td>20</td>
<td>62</td>
</tr>
<tr>
<td>Later added</td>
<td>3</td>
<td>5</td>
<td>25</td>
<td>5</td>
<td>38</td>
</tr>
<tr>
<td>Total Organizations</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>100</td>
</tr>
<tr>
<td>Firm Years</td>
<td>125</td>
<td>125</td>
<td>125</td>
<td>125</td>
<td>500</td>
</tr>
<tr>
<td>Missing Firm Years</td>
<td>7</td>
<td>9</td>
<td>0</td>
<td>11</td>
<td>27</td>
</tr>
<tr>
<td>Total firm-year Observations</td>
<td>118</td>
<td>116</td>
<td>125</td>
<td>114</td>
<td>473</td>
</tr>
</tbody>
</table>

Table 1: Sample selection process of the data, consisting of collecting organizations and dropping missing observations.

ANBI=1: the organization has an ANBI status, ANBI = 0: an organization does not have an ANBI status. HC = 1: not-for-profit health care organizations, HC = 0: other not-for-profit organizations.
Collecting the data of these 100 organizations for the period of 5 years caused some problems with the availability of data which was not fully complete in the database of Orbis. This data is hand collected if possible, but sometimes this data was not available. This was because the organization was not fully operational during the period 2013 – 2017 or the data was simply not updated on the internet.

**Data**

The data used for this research is obtained from the Orbis database. The Orbis database contains information from lots of organizations and organizations in Europe. From the Orbis database, most data can be collected, but there are some missing values. These missing values are hand collected by examining the financial statements of the relevant organizations.

Other data that is not available in Orbis is data about the ANBI status of organizations, this data needs also to be collected by hand. This is done by checking whether the not-for-profit organizations of the sample have an ANBI status registered at the website of the Belastingdienst. At this website, there is named when the organization has obtained their status and whether they lost their status. This gives enough information for creating the corresponding dummy variable.

**Descriptive Statistics**

The descriptive statistics table shows the characteristics of the independent, dependent and control variables used in this research.

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Observations</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discretionary Accuals</td>
<td>473</td>
<td>-0.00</td>
<td>0.96</td>
<td>-11.40</td>
<td>7.29</td>
</tr>
<tr>
<td>Abs. Discretionary Accrals</td>
<td>473</td>
<td>0.42</td>
<td>0.86</td>
<td>0.00</td>
<td>11.40</td>
</tr>
<tr>
<td>ANBI</td>
<td>473</td>
<td>0.52</td>
<td>0.50</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>SIZE</td>
<td>473</td>
<td>9.90</td>
<td>2.19</td>
<td>0.00</td>
<td>14.84</td>
</tr>
<tr>
<td>LOSS</td>
<td>473</td>
<td>0.32</td>
<td>0.47</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>BIG4</td>
<td>473</td>
<td>0.59</td>
<td>0.49</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>EQUITY</td>
<td>473</td>
<td>0.46</td>
<td>0.50</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>EXPENSES</td>
<td>473</td>
<td>0.54</td>
<td>0.50</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>HC</td>
<td>473</td>
<td>0.51</td>
<td>0.50</td>
<td>0.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

*Table 2: Descriptive statistics*

This table shows that the mean of the discretionary accruals is a very small number, close to zero. This is because the discretionary accruals variable contains the signed values for the
discretionary accruals. The variable Absolute Discretionary Accruals contains only absolute values, the mean of that variable shifts upwards, since negative values for the discretionary accruals change to positive values.

Next to that, the mean of ANBI and HC are not exactly 0.5. This is because, as described above, some observations had to be dropped because of unavailability of data. The mean of BIG4 (0.59) showed that approximately 59 percent of the organizations of the total sample have a BIG4-auditor.

Assumptions of linear regression analysis

Since this research contains regressions based on the Ordinary Least Squares (OLS) method, which assumes a linear connection between the dependent and the independent variable of the research, assumptions of linear regression analysis should be tested. According to Stock and Watson (2014), there are four assumptions for multiple linear regression models. These four are:

1) The conditional distribution of the error term has a mean of zero. This means that the error term of the regression model ($\varepsilon$) is uncorrelated with the independent variable, ANBI. If this assumption is not met, the regression faces severe endogeneity problems. To test whether the error term is uncorrelated with the independent variable, a Breusch-Pagan/Cook-Weisberg test is performed. The results of this test are found in table 3 below and indicate that OLS is consistent, since the p-value is significant. This indicates that the null hypothesis of homoskedasticity is rejected and therefore heteroskedasticity is assumed. Therefore, this assumption is not met. To control for this, robust standard errors are used when estimating the regressions.

2) The values are independently and identically distributed. This assumption implies that all values in our database should be random. This assumption will not hold in a database with panel data, because it assumes random variables. So, this assumption is not met. To control for this, control variables are used in this research.

3) Large outliers of the dependent variable are unlikely. This is tested by performing a histogram of the discretionary accruals to look whether they are suffering from large outliers or not. This density graph can be found below at figure 1 and shows that there are not that much large outliers, therefore, this condition is met.
4) There is no large multicollinearity. This means that the correlation between the regressors of the regression model is not equal to 1 or -1. When the correlation is equal to 1 or -1, the two variables are perfectly correlated with each other. This assumption is tested with checking the correlations with a correlation table. This table is presented below (table 4) and shows that there is no perfect multicollinearity between the regressors. Next to this analysis, the variance inflation factors (VIFs) are calculated. The VIFs indicate whether there is multicollinearity present in the model. When the VIF of a variable is above 10.0, the variable is interpreted as being collinear. As table 4 shows, the VIFs are all below 10.0, indicating that there is no multicollinearity in the model.

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>VIF</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) ANBI</td>
<td>1.11</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) SIZE</td>
<td>1.98</td>
<td>0.242*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) LOSS</td>
<td>1.03</td>
<td>-0.036</td>
<td>-0.112*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) BIG4</td>
<td>1.38</td>
<td>0.266*</td>
<td>0.483*</td>
<td>0.008</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5) EQUITY</td>
<td>1.12</td>
<td>-0.080</td>
<td>-0.156*</td>
<td>-0.019</td>
<td>-0.125*</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>(6) EXPENSES</td>
<td>1.85</td>
<td>0.249*</td>
<td>0.636*</td>
<td>-0.096</td>
<td>0.357*</td>
<td>-0.310*</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Table 3: Outcome of the Breusch-Pagan / Cook-Weisberg test - test to test whether the endogeneity assumption holds.

<table>
<thead>
<tr>
<th>Breusch-Pagan / Cook-Weisberg test</th>
<th>Degrees of Freedom</th>
<th>Chi2-statistic</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>257.44</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 4: Pairwise correlation table regarding the regressors, also showing the variance inflation factors (VIFs), the mean VIF is 1.36. * shows significance at the 5% level.

Table 4 shows, as mentioned, the correlations between the different independent and control variables. Correlations are a number between -1 and 1 and indicate the relationship between two variables. The most important relationships are the relationship between ANBI and EQUITY or EXPENSES and between SIZE and EQUITY or EXPENSES, since EQUITY and EXPENSES are incentives for earnings management for managers of organizations with an ANBI status.

The correlation between ANBI and EQUITY is negative, but close to zero. This means that a higher value for ANBI means a lower value for EQUITY. But, since these variables are dummies
and the correlation is not significant, and the correlation is close to zero, this correlation cannot be clearly interpreted.

The correlation between ANBI and EXPENSES is positive and significant. This means that the variables ANBI and EXPENSES move in the same direction, indicating that organizations with an ANBI status are associated with higher expenses compared to organizations that do not have an ANBI status.

The correlation between SIZE and EQUITY is negative and significant. This means that these variables move in other directions, so when SIZE goes up, EQUITY goes down. Since EQUITY is a dummy variable, but SIZE is a continuous variable, it indicates that bigger organizations are associated with smaller amounts of capital.

The correlation between SIZE and EXPENSES is positive and significant. This means that these variables move in the same direction. This is also a strong relationship, since the value is above 0.5. Therefore, larger organizations are associated with more expenses, compared to smaller organizations. This is plausible, since larger organizations perform more activities and therefore have higher costs.

![Density graph of the discretionary accruals (dependent variable)](image-url)
4.8 Summary

The main analysis of this research will be done by using the ‘Modified Jones Model’, designed by Kothari, Leone and Wasley (2005) for determining the discretionary accruals, which is a determinant for earnings management. The regression equation used in this research is:

\[ DAC = \beta_0 + \beta_1 ANBI + \beta_2 SIZE + \beta_3 LOSS + \beta_4 BIG4 + \beta_5 EQUITY + \beta_6 EXPENSES + \beta_7 \ldots + \beta_{10} i.i.d. YEAR + \epsilon \]

The variable of interest in this equation is ANBI, which is a dummy variable for whether an organization has an ANBI status or not.

Next to this regression, other tests will be performed, namely a test for determining the distribution of earnings. Next to that, additional tests will be performed to test the earnings quality, consisting of the smoothness of the earnings.

The next chapter will show the results of the main regression and other tests of this thesis, there will be performed additional tests on the robustness of earnings management as a proxy for earnings quality in the additional section.
Chapter 5: Results

5.1 Introduction

This chapter contains the results of this research, described per hypothesis. These results will be linked at the results of prior literature. This chapter will end with a summary of the most important results.

5.2 Hypotheses 1 and 3

Hypotheses 1 and 3 are stated as follows:

$H_1$: Not-for-profit health care organizations’ earnings are narrowly distributed around zero.

$H_3$: Other not-for-profit organizations’ earnings are narrowly distributed around zero.

As described in chapter 4, these hypotheses will be tested by showing histograms of the earnings distributions of these two kinds of organizations, next to that, there will be performed a two-sided t-test to look whether the earnings are significantly different from zero or not.

The test is performed by using the net income, divided by the lagged total assets, to eliminate the variance in size of the organizations. Lagged total assets are chosen since they also are consistent with the Modified Jones Model, which is used later on for answering the second and fourth hypotheses.

First, the distribution of the earnings is evaluated. Figure 2 and 3 below show the distribution of the net income, scaled by lagged total assets for respectively health care not-for-profit organizations and other not-for-profit organizations.

These histograms are a first indicator for answering hypotheses 1 and 3. They show that the division of the net income, lagged by total assets is around zero, with the mean clearly close around zero. Figure 3 shows that other not-for-profit have just a few very large outliers, which are not observable at the not-for-profit health care organizations. But, almost all observations are close to zero. These results indicate that hypotheses 1 and 3 should not be rejected.
Next to this analysis, there will be performed 2 two-sided t-tests to find out whether the net income, divided by lagged total assets ratio is significantly different from zero. If this is the case for both sub-samples, hypotheses 1 and 3 should be rejected. Otherwise, these hypotheses should not be rejected.

The table 4 below shows the results of the t-tests, performed to find out whether the scaled net income is significantly different from zero.

<table>
<thead>
<tr>
<th></th>
<th>Observations</th>
<th>Mean</th>
<th>Standard Error</th>
<th>T-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other not-for-profit organizations</td>
<td>234</td>
<td>.397</td>
<td>.213</td>
<td>1.85</td>
<td>.064</td>
</tr>
<tr>
<td>Not-for-profit health care organizations</td>
<td>239</td>
<td>.074</td>
<td>.041</td>
<td>1.85</td>
<td>.068</td>
</tr>
</tbody>
</table>

Table 4: Results from the two-sided t-tests, looking if the net income divided by lagged total assets significantly differs from zero, with showing the amount of observations, the mean, standard error, t-value and p-value for earnings.

When evaluating whether the earnings are significantly different from zero or not, a significance level of 5% is used, since this is the most common significant level used in financial research. When evaluating the results using the 5% significance level, there can be concluded that the earnings of other not-for-profit organizations and not-for-profit health care organizations are not significantly different from zero, since the p-value is higher than the previously determined significance level. The mean of the net income, scaled by lagged total assets is expected to be close to zero, but the other not-for-profit organizations mean is relatively high above zero. This can be due to the few large outliers, as described above.
Nevertheless, hypothesis 1 and 3 should not be rejected, because the results indicate that the earnings are narrowly distributed around zero.

Prior literature (Nguyen & Soobaroyen, 2019) also investigate whether the earnings are narrowly distributed around zero. This study researched earnings management at UK charities, for the time period 2007-2012. Nguyen et al. (2019) find that the distributions of the earnings are not significantly different from zero using the 5 percent significance level, in line with the results of this study. Therefore, there can be concluded that the results of this study are conform prior findings.

5.3 Hypothesis 2 and 4

Hypothesis 2 and 4 are stated as follows:

\[ H_2: \text{Not-for-profit health care organizations with an ANBI status engage in earnings management.} \]

\[ H_4: \text{Other not-for-profit organizations with an ANBI status engage in earnings management.} \]

As described in chapter 4, this hypothesis will be tested by performing an OLS regression, using the described equation in section 4.2. The table 5 below shows the results, together with the expected signs. The table shows 3 different regressions for the two sample groups. The first two regressions (showed in models 1 and 2) are performed by looking at the effect of ANBI on the measure for earnings management, the discretionary accruals (DAC), by not using any control variables.

The second two regressions (showed in models 3 and 4) are performed by looking at the effect of ANBI on DAC, by also using control variables, but these regressions do not incorporate any time-fixed effects. The last two regressions (showed in models 5 and 6) do incorporate these year-fixed effects.

The table shows that the variable of interest, ANBI, is not significantly different from zero in any of the regressions. As discussed in chapter 4, the expected sign of this variable is positive, since an ANBI status will provide more incentives for managers to engage in earnings management. Since the coefficients are not significantly different from zero, they are not interpretable and therefore, hypothesis 2 and 4 should be rejected.
<table>
<thead>
<tr>
<th>DAC</th>
<th>Expected Sign</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Other not-for-profit</td>
<td>Not-for-profit health care</td>
<td>Other not-for-profit</td>
<td>Not-for-profit health care</td>
<td>Other not-for-profit</td>
<td>Not-for-profit health care</td>
<td></td>
</tr>
<tr>
<td>ANBI</td>
<td>+</td>
<td>0.205</td>
<td>-0.142</td>
<td>0.224</td>
<td>-0.162</td>
<td>0.230</td>
<td>-0.165</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1.08)</td>
<td>(-1.51)</td>
<td>(1.31)</td>
<td>(-1.73)</td>
<td>(1.33)</td>
<td>(-1.70)</td>
</tr>
<tr>
<td>SIZE</td>
<td>+</td>
<td>0.159</td>
<td>0.005</td>
<td>0.161</td>
<td>0.003</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2.47)*</td>
<td>(0.10)</td>
<td>(2.55)*</td>
<td>(0.06)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOSS</td>
<td>+</td>
<td>0.174</td>
<td>-0.073</td>
<td>0.182</td>
<td>-0.080</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.90)</td>
<td>(-0.83)</td>
<td>(0.86)</td>
<td>(-0.92)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIG4</td>
<td>-</td>
<td>-0.351</td>
<td>0.000</td>
<td>-0.339</td>
<td>-0.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(-1.78)</td>
<td>(0.00)</td>
<td>(-1.79)</td>
<td>(-0.01)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EQUITY</td>
<td>+</td>
<td>-0.088</td>
<td>0.268</td>
<td>-0.091</td>
<td>0.255</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(-0.44)</td>
<td>(2.09)*</td>
<td>(-0.49)</td>
<td>(2.12)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXPENSES</td>
<td>+</td>
<td>-0.122</td>
<td>0.112</td>
<td>-0.111</td>
<td>0.118</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(-0.56)</td>
<td>(0.84)</td>
<td>(-0.52)</td>
<td>(0.84)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td>-0.098</td>
<td>0.073</td>
<td>-1.425</td>
<td>-1.780</td>
<td>-0.105</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(-0.66)</td>
<td>(0.95)</td>
<td>(-2.32)*</td>
<td>(-2.31)*</td>
<td>(-0.23)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year-fixed Effects</th>
<th>No</th>
<th>No</th>
<th>No</th>
<th>No</th>
<th>Yes</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observations</td>
<td>234</td>
<td>239</td>
<td>234</td>
<td>239</td>
<td>234</td>
<td>239</td>
</tr>
<tr>
<td>F-statistic</td>
<td>1.18</td>
<td>2.28</td>
<td>1.32</td>
<td>6.44</td>
<td>2.01</td>
<td>4.62</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.01</td>
<td>0.02</td>
<td>0.07</td>
<td>0.07</td>
<td>0.08</td>
<td>0.08</td>
</tr>
</tbody>
</table>

Table 5: Table with regression results, showing regression coefficients, with z statistics in parentheses. Year dummies are incorporated in order to control for time effects but are not reported for the sake of brevity.

ANBI, LOSS, BIG4, EQUITY and EXPENSES are all dummy variables. SIZE is a continuous variable.

* = significant at 0.05 level, ** = significant at 0.01 level, ***= significant at 0.001 level.

Since there is no prior literature about having an ANBI status and engaging in earnings management, these results cannot be related to the prior literature about organizations with an ANBI status. But, the results can be compared with the literature about not-for-profit organizations and earnings management, since all organizations of the sample have a not-for-profit objective. Previous research on earnings management at not-for-profit health care organizations (Leone & Van Horn, 2005; Ballantine, Forker, & Greenwood, 2007) and other not-for-profit organizations (Kuroki, 2019; Nguyen & Soobaroyen, 2019) find that these firms engage in earnings management.
The results of this research are not supporting prior evidence. There can be several reasons for this, in the first place, the previous researches are not external valid and therefore not applicable to the Netherlands. Another reason can be that the sample group of this research is too small to observe an effect like earnings management and that the sample group of this research does not fully represent the group of not-for-profit organizations in the Netherlands well. A reason for this can be sample bias, since, not all organizations’ information is available at the Orbis database.

Next to these regressions, there are also regressions performed by using the absolute value of the discretionary accruals as dependent variable, since the hypotheses of this research are two-sided. This table can be found in the Appendix A.1.

_The control variables_

The coefficients of the control variables LOSS, BIG4 and EXPENSES are not significantly different from zero and therefore have no significant measured effect and an arbitrary sign. This indicates that having a loss or a BIG4 auditor are not significant associated with earnings management at not-for-profit organizations.

The coefficient for the variable EXPENSES, which is a proxy for the incentive for a manager to manage the earnings, does not show significant results. But, the sign of the coefficient is positive for the other not-for-profit sample, which indicates that there may be a positive association between higher expenses and higher discretionary accruals. This is consistent with the expectation created in chapter 4. For the not-for-profit health care sample, the opposite is indicated.

There are two control variables, SIZE and EQUITY, that are significant at the 5-percent level at some regressions, so these two variables will be discussed.

The variable SIZE, measured by the natural logarithm of the total assets, is positively significant at the 5-percent level in regressions 3 and 5, which belong to the other not-for-profit sample. This indicates that when an other not-for-profit organization’s natural logarithm of total assets increases with one (if the size of the organization increases by one percent), their discretionary accruals ratio will increase by 0.161 (see regression 5), which indicates that there will be committed more earnings management. The increase of 0.161 means that the discretionary accruals divided by lagged total assets rise with that amount, which indicates that the amount
of accruals that cannot be explained by the non-discretionary accruals (normal accruals) rises. Therefore, a larger amount of revenues and expenses are unexplained by the ‘normal’ accruals. Prior evidence suggests that this variable should be positive significant different from zero (Tan, 2011; Kuroki, 2019; Nguyen & Soobaroyen, 2019). Kuroki and Nguyen et al. performed their research on other not-for-profit organizations, Tan performed his research on hospitals. Other research (Eldenburg, Gunny, Hee, & Soderstrom, 2011), performed at hospitals finds that the coefficient of SIZE is not significantly different from zero. This research supports the research of Kuroki (2019), Nguyen et al. (2019) and Eldenburg et al. (2011), while it contradicts the research of Tan (2011), since the coefficients of the regressions of the health care sample are not significantly different from zero. A reason for the contradiction can be that the research of Tan is performed on hospitals only, while the sample group of this research consists of hospitals and other not-for-profit health care organizations.

The variable EQUITY, measured as a dummy variable, which indicates whether the organization is part of the group with the 50%-highest equity to assets ratio, and therefore has an incentive to manage the earnings. This variable is significant at the 5-percent level in the regressions 4 and 6, which belong to the not-for-profit health care organizations sample. This indicates that when an organizations’ equity to assets ratio is above the mean eta ratio, their discretionary accruals to total assets ratio will rise with 0.255 (regression 6), what indicates that there will be committed more earnings management. The increase of 0.255 means that the discretionary accruals divided by lagged total assets rise with that amount, which indicates that the amount of accruals that cannot be explained by the non-discretionary accruals (normal accruals) rises. Therefore, a larger amount of revenues and expenses are unexplained by the ‘normal’ accruals. So, having the incentive to manage the earnings (because of the ANBI regulations regarding the equity limitation) is associated with earnings management. There is no prior evidence available that gives an indication for results regarding this control variable, but since this control variable is self-constructed, there was a positive expected sign. Since organizations with more equity in relation to their assets have more incentives for earnings management, since they want to obey to the rule of their equity limitation, regarding their ANBI status. Therefore, the findings are supporting the expectation created before the research.
5.4 Additional tests

As described in chapter 4, there will be performed a robustness check on the results by using smoothness of the earnings as another proxy for earnings quality. Beisland and Mersland (2014) also used this proxy in determining the earnings quality of not-for-profit organizations. The smoothness of earnings is calculated by taking the standard deviation of earnings, which are calculated by dividing net income by total assets. Then, a F-test for differences in standard deviations between groups is performed to find out if there are any significant differences between the two groups. The results are shown in table 6 below.

The results show that the two standard deviations are significantly different from each other, since the p-value is very close to zero (0.000). This means that the standard deviation of not-for-profit health care organizations is significantly lower for organizations with an ANBI status, compared to organizations without, since the standard deviation of organizations with an ANBI status (0.070) is lower compared to organizations without that status (0.327). A lower standard deviation in earnings means higher earnings quality, as mentioned by Dechow et al. (2010). The earnings are less volatile, and therefore of higher quality. That is because past earnings can better predict future earnings.

The same test is also performed for other not-for-profit organizations. The results are shown in table 7 below.

### Table 6: Output on a F-test of the smoothness of earnings of not-for-profit health care organizations, with the amount of observations, mean, standard error and standard deviation of the earnings proxy net income divided by total assets. In the lowest row, the p-value of the difference is showed. The p-value is calculated using a F-test for differences in standard deviations between groups.

<table>
<thead>
<tr>
<th></th>
<th>Observations</th>
<th>Mean</th>
<th>Standard Error</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANBI-status</td>
<td>128</td>
<td>0.018</td>
<td>.006</td>
<td>0.070</td>
</tr>
<tr>
<td>no ANBI-status</td>
<td>111</td>
<td>-0.011</td>
<td>.031</td>
<td>0.327</td>
</tr>
<tr>
<td>p-value of difference</td>
<td></td>
<td></td>
<td></td>
<td>0.000</td>
</tr>
</tbody>
</table>

### Table 7: Output on a F-test of the smoothness of earnings of other not-for-profit organizations, with the amount of observations, mean, standard error and standard deviation of the earnings proxy net income divided by total assets. In the lowest row, the p-value of the difference is showed. The p-value is calculated using a F-test for differences in standard deviations between groups.

<table>
<thead>
<tr>
<th></th>
<th>Observations</th>
<th>Mean</th>
<th>Standard Error</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANBI-status</td>
<td>118</td>
<td>0.708</td>
<td>.413</td>
<td>4.489</td>
</tr>
<tr>
<td>no ANBI-status</td>
<td>116</td>
<td>0.124</td>
<td>.073</td>
<td>0.789</td>
</tr>
<tr>
<td>p-value of difference</td>
<td></td>
<td></td>
<td></td>
<td>0.000</td>
</tr>
</tbody>
</table>
The results show that the two standard deviations are significantly different from each other, since the p-value is very close to zero (0.000). This means that the standard deviation of other not-for-profit organizations is significantly higher for organizations with an ANBI status, compared to organizations without, since the standard deviation of organizations with an ANBI status (4.489) is higher compared to organizations without that status (0.789). A higher standard deviation in earnings means lower earnings quality, as mentioned before, because the earnings are more volatile.

The results of the two additional tests are contradicting each other, because at health care organizations, an ANBI status is associated with lower earnings quality, while at other not-for-profit organizations, having an ANBI status is associated with higher earnings quality.

The results of these additional tests are indicating that organizations with an ANBI status are associated with higher earnings quality for not-for-profit health care organizations, this is not in line with the expectation of this research, but similar to the results found when using earnings management as a proxy for earnings quality. Since, the expectation before this research was that other not-for-profit organizations with an ANBI status engage in earnings management and have more incentives for this, compared to organizations without an ANBI status.

For other not-for-profit organizations, these additional tests are indicating that an ANBI status is associated with lower earnings quality, which is in line with the expectations and previous studies on earnings management. This is contrary to the results from the results found when using earnings management as a proxy for earnings quality. This difference comes from the point that the earnings management test is more complex and therefore may be more accurate in determining earnings quality.

### 5.5 Summary

This section summarizes the most important results of this thesis, divided per hypothesis.

**H1:** Not-for-profit health care organizations’ earnings are narrowly distributed around zero.

This hypothesis is not rejected, since there is supporting evidence that the earnings (measured by the net income divided by lagged total assets) of not-for-profit health care organizations are narrowly distributed around zero.
H2: Not-for-profit health care organizations with an ANBI status engage in earnings management.

This hypothesis is rejected, since there is no significant relationship between having an ANBI status for a not-for-profit health care organization and the measurement for earnings management, the discretionary accruals.

H3: Other not-for-profit organizations’ earnings are narrowly distributed around zero.

This hypothesis is not rejected, since there is supporting evidence that the earnings (measured by the net income divided by lagged total assets) of other not-for-profit organizations are narrowly distributed around zero.

H4: Other not-for-profit organizations with an ANBI status engage in earnings management.

This hypothesis is rejected, since there is no significant relationship between having an ANBI status for another not-for-profit organization and the measurement for earnings management, the discretionary accruals.

Next to that, additional tests show that an ANBI status is associated with more smoothness in earnings for not-for-profit health care organizations but is associated with less smooth earnings for other not-for-profit organizations. This indicates that having an ANBI status is associated with higher earnings quality for other not-for-profit organizations, since the earnings are less volatile and therefore more predictable. Next to that, lower earnings quality for not-for-profit health care organizations is associated with having an ANBI status, since the earnings for this organizations are more volatile and therefore less predictable.
Chapter 6: Conclusions, limitations and recommendations

6.1 Conclusions

The goal of this research is to determine whether there is earnings management at Dutch not-for-profit organizations with an ANBI status or not. In order to achieve this goal, the research question of this thesis is:

“Is having an ANBI status associated with earnings management and earnings quality for Dutch not-for-profit organizations?”

The results of this research indicated that there is some significant evidence supporting this research question. The results indicate that the earnings of not-for-profit health care organizations and other not-for-profit organizations are narrowly distributed around zero, which can be an indication for earnings management.

But, whether Dutch not-for-profit organizations with an ANBI status engage in earnings management is not proven in this thesis, there are indications for this, but no significant proof. Therefore, from the main research, there cannot be concluded that having an ANBI status is associated with earnings management for Dutch not-for-profit organizations. But, the results show significant proof that larger other not-for-profit organizations engage in more earnings management compared to smaller other not-for-profit organizations. Next to that, not-for-profit organizations with a higher equity to assets ratio engage in more earnings management, which is an indicator that the equity limitation rules (the equity is limited to a ‘reasonable’ level (Appendix A.2)) might provide incentives for earnings management.

The additional tests, looking at the earnings’ smoothness indicate that not-for-profit health care organizations with an ANBI status have smoother earnings, and therefore higher earnings quality, compared to organizations with that status. Because, when earnings are less volatile, earnings are better predictable and are therefore of higher quality. Regarding other not-profit-organizations, the results indicate the opposite. So, the earnings of other not-for-profit organizations with an ANBI status are less smooth and therefore have lower quality.

Therefore, the results of this research are contradicting each other, but, in general, there can be stated that earnings management and earnings quality are associated with having an ANBI status for Dutch not-for-profit organizations. Considering the earnings of not-for-profit
organizations with an ANBI status are narrowly distributed around zero and the organizations with an ANBI status are significantly associated with an other earnings quality compared to organizations without that status.

This research contributes to the Dutch policy makers, by showing that the equity limitation rule of ANBI organizations might be associated with earnings management, they can take this into account when evaluating their policies. This research also helps external auditors in determining their audit strategies, since it gives some indications for sections in the financial statements, like the equity of organizations, that should have more attention. Finally, this research contributes to the knowledge about earnings management in the not-for-profit sector in the Netherlands.

6.2 Limitations and recommendations

Because the time limitation of this research, only 100 organizations are researched. In the most ideal situation, where there is more time available, this research should have focused on more organizations during a longer time horizon. Broader research will provide a better picture regarding earnings management at not-for-profit organizations in the Netherlands. Therefore, redoing this study and investigating more organizations during a longer time horizon will be recommended.

Fixed assets are used as a proxy for property, plant and equipment because of the availability of this data in the dataset of Orbis. Property, plant and equipment data is not available in that database. But, almost all fixed assets consist of property, plant and equipment at not-for-profit organizations, therefore, this choice is justified, but not ideal. Future research should use data on property, plant and equipment instead of data on fixed assets.

Another limitation of this research is that the group of other not-for-profit organizations is highly dispersed. Further research can be focused on designing more specific groups like for instance not-for-profit health care organizations, schools etcetera.

This research is done by aiming specifically at the Netherlands, future research should focus more on not-for-profit organizations and earnings management in other countries, just like this study did. Performing that kind of research helps students, researchers, organizations, but also regulators with more information about not-for-profit organizations.
Bibliography


NRC. (2017, May 7). *40 controleurs voor 43.000 stichtingen*. Opgehaald van https://www.nrc.nl/nieuws/2017/05/07/40controleurs-voor-43000-stichtingen-8720937-a1557551


Appendices
A.1: Figures and Tables

Figure A.1.1: The reporting costs of non-profit hospitals, according to (Leone & Van Horn, 2005).

![Diagram showing the reporting costs of non-profit hospitals](image)

Figure A.1.2: Libby Boxes of this research

```
<table>
<thead>
<tr>
<th>Concepts</th>
<th>Operational Measures</th>
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<tr>
<td>Independent Variable (X)</td>
<td>Dependent Variable (Y)</td>
</tr>
<tr>
<td>Having an ANBI status</td>
<td>Earnings Management</td>
</tr>
<tr>
<td>ANBI (Dummy Variable which is 1 for organizations with an ANBI status)</td>
<td>Discretionary accruals (computed by the Modified Jones model)</td>
</tr>
<tr>
<td>Control Variables: SIZE, LOSS, BIG4, f.YEAR, EQUITY, EXPENSES</td>
<td></td>
</tr>
</tbody>
</table>
```

Figure A.1.2: Libby Boxes of this research
<table>
<thead>
<tr>
<th></th>
<th>Expected Sign</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Other not-for-</td>
<td>Other not-for-</td>
<td>Other not-for-</td>
<td>Other not-for-</td>
<td>Other not-for-</td>
<td>Other not-for-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>profit health</td>
<td>profit health</td>
<td>profit health</td>
<td>profit health</td>
<td>profit health</td>
<td>profit health</td>
<td></td>
</tr>
<tr>
<td>ANBI</td>
<td>+</td>
<td>0.032 (+0.19)</td>
<td>-0.092 (-0.99)</td>
<td>0.058 (+0.34)</td>
<td>0.066 (+1.03)</td>
<td>0.051 (+0.28)</td>
<td>0.059 (+0.91)</td>
</tr>
<tr>
<td>SIZE</td>
<td>+</td>
<td>-0.026 (-0.34)</td>
<td>-0.072 (-1.65)</td>
<td>-0.024 (-0.31)</td>
<td>-0.078 (-1.68)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOSS</td>
<td>+</td>
<td>0.017 (+0.13)</td>
<td>-0.135 (-1.09)</td>
<td>0.042 (+0.30)</td>
<td>-0.139 (-1.15)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIG4</td>
<td>-</td>
<td>0.199 (+0.88)</td>
<td>0.012 (+0.15)</td>
<td>0.181 (+0.81)</td>
<td>0.016 (+0.20)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EQUITY</td>
<td>+</td>
<td>0.040 (+0.24)</td>
<td>-0.041 (-0.72)</td>
<td>0.084 (+0.48)</td>
<td>-0.047 (-0.83)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXPENSES</td>
<td>+</td>
<td>0.316 (+1.08)</td>
<td>-0.033 (-0.36)</td>
<td>0.301 (+1.02)</td>
<td>0.000 (+0.00)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td>0.541 (4.26)**</td>
<td>0.331 (3.87)**</td>
<td>0.523 (0.88)</td>
<td>1.036 (2.18)*</td>
<td>0.737 (1.00)</td>
<td>1.057 (2.22)*</td>
</tr>
<tr>
<td>Year-fixed Effects</td>
<td></td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td></td>
<td>234</td>
<td>239</td>
<td>234</td>
<td>239</td>
<td>234</td>
<td>239</td>
</tr>
<tr>
<td>F-statistic</td>
<td></td>
<td>0.04</td>
<td>0.97</td>
<td>0.70</td>
<td>1.09</td>
<td>1.68</td>
<td>1.25</td>
</tr>
<tr>
<td>$R^2$</td>
<td></td>
<td>0.00</td>
<td>0.01</td>
<td>0.02</td>
<td>0.13</td>
<td>0.03</td>
<td>0.14</td>
</tr>
</tbody>
</table>

Table A.1.1: Table with regression results, showing regression coefficients, with z statistics in parentheses. Year dummies are incorporated in order to control for time effects but are not reported for the sake of brevity.

ANBI, LOSS, BIG4, EQUITY and EXPENSES are all dummy variables. SIZE is a continuous variable.

* = significant at 0.05 level, ** = significant at 0.01 level, *** = significant at 0.001 level.
A.2: Specific rules and regulations for organizations with an ANBI status.

At their website, the “Belastingdienst” also described the qualifications for organizations with an ANBI status (Belastingdienst, 2019a):

- The so-called “90%-requirement” as described in the introduction: an organization can only have an ANBI status if 90 percent of their expenditures serve the public benefit. For instance, a choir serves the benefit of their members personally but not the public benefit. But, when the choir organizes only free concerts for 90 percent of their activities, they serve the public benefit. This 90-percent is a somewhat vague criteria, but the Belastingdienst approaches every organization in a different way and therefore this is not one solid criteria.

- The organization does not have a profit motive for all their head activities. So, their ancillary activities may be profitable, but not their main activities. When a museum for example has a shop, the museum still can be an ANBI organization, because the shop is not their main activity.

- The organization and the people that are directly involved in the organization comply to the integrity requirements. These integrity requirements involve that the organization and the directly involved people should not encourage the use of violence or hate against other persons or organizations. On top of that, directors, policy makers or other prominent persons of the organization may not have been convicted in the last 4 years.

- There has to be separate equity of the organization, this means that directors or policy makers of the organization cannot act like the equity of the organization is their own. Therefore, the board of the organization has to consist of at least 3 persons, who have equal rights, so they can never act on their own. Because, when a majority vote has to be obtained, 2 persons have to agree.

- The equity of the organization has to be limited to a reasonable level. This is also called the ‘bestedingscriterium’. An organization may only keep the equity that is aimed for realizing a specific target, this is part of the special-purpose reserves of the organization. Next to that, the organization may keep a continuation reserve, with is meant for guaranteeing the continuity of the organization if their income may vary over the coming years.
- The compensation for directors is limited to a compensation for expenses or limited ‘vacatiegelden’ (job board fees).
- The organization has an actual policy plan. This policy plan must contain information about the policy and strategy of the organization, their business information, the composition of the board (including the names of the board members) and the financial information of the organization.
- The organization has a reasonable proportion between expenses and spending. The exact meaning of reasonable differs between organizations and relies on the nature of the organization. This is a somewhat vague criteria, but the Belastingdienst approaches every organization in a different way, and this changes per organization.
- If the ANBI organization stops to exist, it has to donate all the money that remains from the liquidation to an ANBI organization with a same purpose.
- The ANBI organization has to meet several administrative obligations, from their administration it has to be clear how much compensation for expenses and job board fees every director got. Next to that, all the expenses have to be clear and the nature and size of the income has to be clear.
- The organization has to publish several data on a special website. This is the same information as in the policy plan, and next to that, it has to publish their balance sheet, income statement and notes to the balance sheet and the income statement.
## A.3: Variable description table

<table>
<thead>
<tr>
<th>Variable name</th>
<th>Description</th>
<th>Used Database</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAC</td>
<td>Earnings management; measured by the discretionary accruals and computed by the Modified Jones Model.</td>
<td>Orbis</td>
</tr>
<tr>
<td>ANBI</td>
<td>Dummy variable, equal to 1 in an organization has an ANBI status, otherwise equal to 0.</td>
<td>Hand-collected, using the website of the ‘Belastingdienst’.</td>
</tr>
<tr>
<td>SIZE</td>
<td>Size of the organization; calculated by the natural logarithm of the total assets.</td>
<td>Orbis</td>
</tr>
<tr>
<td>LOSS</td>
<td>Dummy variable, equal to 1 if the organization has a loss during the particular year and equal to 0 if the organization has a profit.</td>
<td>Orbis</td>
</tr>
<tr>
<td>BIG4</td>
<td>Dummy variable, equal to 1 if the organization has a BIG4 auditor during the particular year and equal to 0 if the organizations has a non BIG4 auditor.</td>
<td>Orbis</td>
</tr>
<tr>
<td>i.YEAR</td>
<td>Dummy variables, equal to 1 if the observation is from the particular year. All the years of the observations (2013-2017) have their own dummy variable.</td>
<td>Orbis</td>
</tr>
<tr>
<td>EQUITY</td>
<td>Dummy variable which is 1 if the organization is in the highest 50 percent of the organizations regarding the equity-to-assets-ratio</td>
<td>Orbis</td>
</tr>
</tbody>
</table>
A.4: Literature Review

The table on the next page shows the papers that are discussed in Chapter 3 at the literature review and the hypothesis development. The table contains the title of the research, the writers, and in which years it is published. Next to that, there is a column that describes the model and the dependent and most relevant independent variables for this research. Not all independent variables are mentioned, since this research looks at not-for-profit organizations more in general, compared to other researches that look at specific sectors. Next to that, the sample and most important findings are discussed.
<table>
<thead>
<tr>
<th>#</th>
<th>Paper</th>
<th>Model, Dependent and Independent Variables</th>
<th>Sample</th>
<th>Findings</th>
</tr>
</thead>
</table>
| 1  | Eldenburg et al (2011): “Earnings Management Using Real Activities: Evidence from Nonprofit Hospitals” | The model is estimated via OLS, using Roger’s robust standard and year clustering (Gow et al 2010; Petersen 2009)  
The model looks at real earnings management, measured by AExpend, which is the change in non-operating or non-revenue from t-1 to t, deflated by assets.  
Most important independent variables are size, sales change and year. | The sample consists of California not-for-profit hospitals over the years 1998-2003. (432 firm-year observations) | They find that managers of NP Hospitals manage expenditures to achieve positive income but also that large positive incomes are avoided. |
| 2  | Tan (2011): “Earnings management in not-for-profit hospitals - evidence from Taiwan” | The (Modified) Jones Model.  
The dependent variable is EM (Earnings Management), which is measured by the Discretionary accruals.  
Most important independent variables are leverage, size and year. | The sample consists of foundation hospitals in Taiwan for the period 2006-2008. (150 firm-year observations) | The evidence suggests that managers of not-for-profit hospitals use their managerial discretion at accounting choices to meet earnings targets. |
| 3  | Leone and van Horn (2005): “How do nonprofit hospitals manage earnings?” | Made models themselves, as a robustness check, they used the Jones model.  
The dependent variable of the Jones Model is the DA, measured by the discretionary accruals.  
They mentioned no relevant independent variables for this research. | Sample period is 1990–2002.  
The sample consists of 1204 hospitals and 8179 hospital-year observations | CEOs minimize reporting costs by earnings management toward zero after pre-managed earnings are observed. Their evidence is consistent with this zero-profit hypothesis with respect to discretionary accruals. |
Dependent variable is change in Working Capital Accruals. But they have no relevant control variables for this reasearch. | The data for the study comprises 1,372 Trust years for hospital Trusts in the UK covering the seven-year period 1998 to 2004. | The earnings are distributed narrowly around zero. This research showed a direct link between this distribution and non-discretionary accruals. |
### Panel B: Other Not-for-Profit Organizations

<table>
<thead>
<tr>
<th></th>
<th>Author(s)</th>
<th>Model</th>
<th>Dependent Variable</th>
<th>Independent Variables</th>
<th>Sample</th>
<th>PC&amp;U managers have incentives to decrease income towards zero. His findings are consistent with Leone and van Horn.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>M. Kuroki: “Earnings Management toward Zero: Evidence from Japanese Private Colleges and Universities”</td>
<td>Used the Burghstaler and Dichev (1997) model.</td>
<td>$EBCEO_{Si,t}$, which means a positive earnings before capital expenditures number.</td>
<td>Change in assets, Change in Cash Flow of operations, Logarithm of Assets (Size) and Year.</td>
<td>Sample is 2009-2013, all available data of Japanese Private Colleges and Universities (2973 firm-year observations).</td>
<td>No or minor differences in earnings quality between profit and nonprofit organizations, effects are expected to cancel each other out.</td>
</tr>
<tr>
<td>6</td>
<td>Beitland and Mersland (2014): “Earnings Quality in Nonprofit Versus For-Profit Organizations: Evidence From the Microfinance Industry”</td>
<td>They follow Barth et al. (2008) for Earnings Management.</td>
<td>Smoothness is measured by the standard deviation of earnings; Persistence is measured by the regression coefficient of current earnings on lagged earnings. Predictability is the explanatory power of previous model.</td>
<td>Earnings management is measured by: 1. The standard deviation of the change in earnings; 2. Small profit frequency; 3. Large loss frequency.</td>
<td>The dataset consists of 403 MFIs from 73 countries. (1,616 firm-year observations)</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Nguyen, Soobaroyen (2019): “Earnings Management by Not-for-profit Organisations: Evidence from UK Charities”</td>
<td>They adopt the Jones (1991) model.</td>
<td>Dependent variable is DA, which are discretionary accruals. Independent variables are Discretionary accruals of previous period, accruals of previous period, Leverage and Size.</td>
<td>UK charities (with minimum income of £500 000) for a six-year period from 2007 to 2012. (4242 firm-year observations)</td>
<td>Earnings are narrowly distributed among zero, with more positive than negative earnings. Earnings are managed around zero, so either upwards or downwards.</td>
<td></td>
</tr>
<tr>
<td>Page</td>
<td>Reference</td>
<td>Description</td>
<td></td>
<td></td>
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<td>8</td>
<td>Verbruggen en Christiaans (2012): “Do Not-for-profit Organizations Manage Earnings toward Zero Profit and Does Governmental Financing Play a Role?”</td>
<td>They used the Jones (1991) model. Dependent variable is DA, which are the discretionary accruals. Independent variables are: earnings divided by assets. Other independent variables are not relevant for this research.</td>
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<td>The analysis was based on a sample of 841 organizations that filed a full set of financial statements in 2006-2008. Looked 20 different sectors. (2523 firm year observations).</td>
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<td>Mean and median of reported earnings are closer to zero then unmanaged earnings. Next to that, further research showed that earnings are managed downwards when pre-managed earnings are positive.</td>
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