



# The future role of the Dutch housing corporations

## **Abstract**

Housing corporations are an important actor in the Dutch housing market. A parliamentary investigation showed there were a lot of incidents within the housing corporations. In this thesis I examine what the current role of the housing corporations is in the Dutch housing market and I question whether a case can be made for its privileged position based on the level of earnings management. To answer this question I use OLS regression analysis and I examine the 2011 annual reports of the housing corporations. The regression is based on financial information of 2011 provided by the Orbis database. The outcome of this study is that housing corporations engage less in real based earnings management than purely market based firms.

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## Preface

In front of you is my Master thesis for Spatial planning. In the last five months I have been working on this thesis to finalize my Master. First of all, I would like to thank my thesis supervisor Pascal Beckers for this guidance and advice during the writing of this thesis. I would also like to thank Deloitte for granting me an intern position at the Amsterdam office. They gave me a lot of freedom to work on this Master thesis and offered guidance where needed.

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## Summary

Housing corporations are an important actor in the Dutch housing market. A parliamentary investigation showed there were a lot of incidents within the housing corporations. In this thesis I examine what the current role of the housing corporations is in the Dutch housing market and I question whether a case can be made for its privileged position based on the level of earnings management.

The Dutch housing corporations are characterized as hybrid entities since they do not fall into one specific sphere of the public, private or third sector (e.g., Billis, 2010b; Brandsen, 2006a). The most important third sector elements of the housing corporations are a distinctive social mission, the use of volunteers and member involvement. These elements enable the housing corporations to benefit from four distinct privileges provided by the Dutch Government. These include state guarantees for the loans from the WSW, support from the CFV, the sale of public land by municipalities at a price below market value and the right to borrow from the Dutch Municipality Bank.

To answer the research question I use OLS regression analysis and I examine the 2011 annual reports of the housing corporations. The regression is based on financial information of 2011 provided by the Orbis database. The outcome of the quantitative study is that housing corporations engage less in real based earnings management than purely market based firms. Based on my qualitative research of the annual reports there are no large differences to be found in the third sector elements of the housing corporations with the lowest level of earnings management and the housing corporations with the highest level of earnings management.

To conclude, it appears the privileged position of the housing corporations is justified based on the level of real based earnings management.

## Contents

Preface.....	2
Summary .....	3
List of figures and tables.....	5
I Introduction.....	6
II The Dutch housing market and the privileged role of the housing corporations .....	10
2.1 The Dutch housing market .....	10
2.1.1 The rental market.....	11
2.1.2 The property market .....	11
2.2 The current role of the housing corporations .....	13
2.2.1 Key numbers.....	13
2.2.2 The start of the housing corporations.....	15
2.2.3 The current structure and actors .....	17
2.3 The privileged role of the housing corporations .....	20
III The institutional framework.....	24
3.1 Public, private, and the third sector.....	24
3.2 Housing corporations as a hybrid organization.....	28
3.2.1 The public aspects of hybridity.....	29
3.2.2 The private aspects of hybridity .....	30
3.2.3 The third sector aspects of hybridity.....	31
3.3 The positioning of the housing corporations in the conceptual framework .....	34
IV Earnings management as a financial criterion .....	36
4.1 Earnings management.....	37
4.2 The motivations for earnings management .....	38
4.3 Earnings management and housing corporations .....	40
V Research method .....	42
5.1 Research design.....	42
5.2 Data and sample.....	45
5.3 Measurement of variables .....	47
5.3.1 Proxy for accrual based earnings management .....	48
5.3.2 Proxy for real-based earnings management .....	51
5.3.3 Regression model and control variables .....	54
VI Results .....	56
6.1 Descriptive statistics.....	56

6.2 Regression analysis.....	59
6.3 Archival research.....	63
6.3.1 Housing corporations with a low level of earnings management.....	64
6.3.2 Housing corporations with a high level of earnings management.....	68
VII Conclusion.....	71
Bibliography.....	77
Appendix A.....	85
Appendix B.....	88

## List of figures and tables

Figure 1: the number of housing corporations in the Netherlands.....	14
Table 1: the relation between rent and income in the period 2008-2011.....	14
Figure 2: organization of the housing sector.....	17
Table 2: core elements of the public, private, and the third sector.....	24 & 25
Figure 3: the different hybrid zones.....	28
Table 3 core elements of the public, private, and the third sector applied to the housing corporations.....	33
Figure 4: the Dutch housing association as a hybrid entity.....	35
Table 4: descriptive statistics of the control variables.....	57
Table 5: descriptive statistics of standardized accrual-based earnings management (AEM).....	57
Table 6: descriptive statistics of standardized real-based earnings management (REM).....	58
Table 7: statistics for accrual earnings management as dependent variable with HousingCorporation, SIZE, GROWTH, and PROF as independent variables.....	61
Table 8: statistics for real earnings management as dependent variable with HousingCorporation, SIZE, GROWTH, and PROF as independent variables.....	62

## I Introduction

Housing corporations are an important actor in the Dutch housing market. Housing corporations in the Netherlands are managing almost 2.4 million rented dwellings and they accompany almost a third of the entire Dutch population (VROM, 2010). The market, where the corporations are active can basically be characterized as a monopoly. The market power of the corporations is enormous (Niehof, 2008). Next to this, the housing corporations in the Netherlands have a privileged position over market-based parties, the corporations receive state aid from the government. Ranging from cheaper land to loan guarantees of the government (European Commission, 2009).

In 2009, it became apparent that Vestia, the biggest housing corporation in the Netherlands got into financial problems. Even though this scandal was a few years back the media is still extensively reporting about the Vestia scandal. The company got in enormous financial problems due to the extensive use of financial derivatives (Verbaeken, 2012). The use of these instruments is called hedge accounting. This is one way to keep financials outside the books, however hedge accounting is only allowed under very stringent conditions in the Dutch law (Frederik, 2012). Vestia tried to portray a rosy picture of their performance by applying earnings management. Earnings management happens when managers use their judgment in financial reporting and in structuring transactions to modify financial reports to either mislead stakeholders or to influence contractual outcomes that depend on the reported accounting numbers (Healy & Wahlen, 1999). The use of earnings management can be applied to Vestia, the management made use of the accounting limitations to report accounting numbers that did not reflect their true economic performance.

The Vestia scandal had severe consequences for the public sector. The Dutch government laid its hand on Vestia's most valuable collateral, leaving almost nothing valuable left for the banks. The banks were now questioning the reliability of the Dutch government. As a consequence, the banks raised their interest rates for housing corporations but also schools and other government related corporations were subjected to higher interest rates (FD, 2012). To mitigate their losses, Vestia

decided to increase their rents by almost 9%. Several political parties questioned this increase. They argued that tenants should not be punished by the mistakes which were made by Vestia's management (Czerwinski, 2012). Next to the tenants, the other housing corporations in the Netherlands were also negatively affected by Vestia. Vestia took a loss of a 1.3 billion euro and the remaining 700 million euro was paid by the other housing corporations through the Central Housing Fund (CFV) (Boon, 2012).

The problems at Vestia lead to a lot of media attention and several questions were asked by the political parties. The former lead to a parliamentary investigation (*parlementaire enquête*). There were several other incidents alongside Vestia and the Dutch government was worried that these troubles would have negative consequences for the tenants. The investigation was not just aimed at Vestia, but it looked into the entire housing corporation sector. It became clear that there were more troublesome cases in this sector next to Vestia (NOS, 2012). So are housing corporations the best party to operate and manage the dwellings?

The above leads to my research question: what is the role of the housing corporations in the Dutch housing market and can a case be made for its privileged position on the grounds of financial criteria? The former leads to three different sub questions.

1. How is the Dutch housing market organized and what is the role of the housing corporations?
2. How can the institutional framework be used to explain the (privileged) position of the housing corporations?
3. To what extent is earnings management used among the Dutch housing corporations relatively to private actors?

The first sub question will be elaborated on in chapter two. I will first lay out the current structure of the Dutch housing market in section 2.1. In the next section the role of the housing corporations will

be described while paying attention to key numbers, the history and the structure of the housing corporations. This chapter will end (section 2.3) with the privileged role of the housing corporations.

The second sub question will be the focus of chapter three. Before the housing corporations can be placed in an institutional framework it is essential to generally describe the institutional theory (3.1). After this introduction to the institutional framework the housing corporations will be placed in the conceptual framework using the theory described in the beginning of this chapter.

The third sub question will cover my statistical analyses of the level of earnings management among the housing corporations. Before I can run my analysis it is important to explain earnings management as a financial criterion and the motivations of managers to engage in earnings management, chapter four will therefore focus on these two aspects.

Chapter five contains my research design, a description of the data and the proxies which I use to examine the level of earnings management among the housing corporations and the market based parties. Chapter six describes the results of my quantitative and qualitative research and this will be used to answer my research question in the conclusion.

This research contributes to the existing literature. The first contribution is that my study can give new insights regarding the role of housing corporations. If I can find that housing corporations apply more earnings management than market firms it might be better to have more market based parties involved in the housing market. Additionally I am, to the best of my knowledge, also the first author to provide evidence on the level of earnings management among housing corporations in the Netherlands. In the literature there has not been a big scale research into this topic. There is only a limited amount of research which examines abusive behavior in the real estate business. For example, Edelenstein, Lium, & Tsang (2009) examine whether there is real-based earnings management among U.S. real estate investment trusts (REIT). Another study which focuses on REITS is completed by Ambrose & Bian (2009), this research investigates the interaction between stock price movement and REIT earnings management. Finally, I place the Dutch housing corporations in a

conceptual model based on Billis (2010a; 2010b) as where Billis (2010a; 2010b) is primarily focusing on the English sector.

The social relevance is also an important aspect of my research. As said before the Vestia case had a significant impact on the public financing, tenants and the housing corporation sector. If I can find that housing corporations apply more earnings management it might be better that more market-based parties are involved. This way the public financing will not be affected and there will be less interference of the government and other housing corporations. The government will be less involved in the market and it is not necessary to bail out a company. This money can be used for other aspects within the government such as education and infrastructure. A second social contribution is related to providing additional empirical evidence on possible fraudulent behavior. In 2009, the VROM inspection asked INTRAVAL to do an inspection of the Dutch housing corporations. Their goal was to perform an analysis of vulnerabilities and risks for possible fraud within the housing corporations. INTRAVAL researched this by doing one specific analysis called the ABC transaction check. This is a construction that is often used to commit fraud. It includes the inflation of property prices by selling it back and forth between two persons A and B before selling the property to person C (Shunnar & Barry, 2011). In the INTRAVAL research they ask specifically for more empirical evidence of possible fraud in the Dutch housing sector (INTRAVAL, 2010).

## **II The Dutch housing market and the privileged role of the housing corporations**

The second chapter will start with describing the Dutch housing sector and it will focus on the rental and the property markets. Section 2.2 will elaborate more on the role of housing corporations in the Dutch housing market including key numbers, the history and the structure of the housing corporations. This chapter will end (section 2.3) with the privileged role of the housing corporations. The housing corporations benefit from four measures, ranging from cheaper land to loan guarantees of the government (European Commission, 2009).

### **2.1 The Dutch housing market**

This section will shortly describe the Dutch housing market and will differentiate between the rental sector and the owner-occupied sector. The housing market plays a crucial role in an economy. Real estate is an important part of the household wealth, the housing related expenses are a big part of the household's consumption, rental prices are determining consumer prices, the housing taxation has a significant influence on the public financing, and the structure of the housing market could influence the supply side of the economy. The availability of housing could influence aspects such as labor and mobility. Furthermore, the housing market has a significant influence on the economic and financial cycles, sharp declines or increases have a major impact on the economic and financial stability of a country. The Dutch housing market is characterized by a high level of regulation and low supply-elasticity (European Commission, 2012). The supply elasticity indicates whether the housing supply is responding to a change in the demand. The supply elasticity in the Netherlands is around 0.3 which is low and especially when this number is compared to other European countries. For example Denmark has a supply elasticity of 0.66, France 1.09 and Germany, 2.05 (Swank, Kakes, & Tiemand, 2002).

### 2.1.1 The rental market

The rental market in the Netherlands is dominated by the regulated social housing. Over 75% of the rental dwellings are managed by housing corporations. The remaining 25% of the rented dwellings are owned by pension funds, insurance companies and private individuals (European Commission, 2012). The national government is still determining the level of the rent and 98% of the dwellings that are operated by the housing corporations are under this rent control of the government (de Kam, 2007; European Commission, 2009). The rent control applies to both the private and the social sectors (European Commission, 2012). Since the housing corporations are operating and managing such a large amount of dwellings they have an important role in the Dutch housing sector. The role of the housing corporations will be covered in section 2.2. The rent regulation is based on three features which are: a maximum rent level, annual rent adjustments and the protection of the tenants. The first characteristic is based on a point system. Several aspects are taken into account to calculate the proper level of the rent. Some examples are the quality of the dwelling (size and facilities) but this system also looks at amenities in the surrounding areas (e.g., school and public transport). Next to this regulation the government also provides rent subsidies for both the social and private sector tenants (European Commission, 2012).

### 2.1.2 The property market

Next to the rental market there is also a substantive property market in the Netherlands. The last couple of years are characterized by price drops and a decreased number of houses being built. This led to an even further mismatch between the rental and property market. This situation exists due to the government interference. There is a strong stimulation of the demand side by the government (VROM, 2010). Two important aspects of this stimulation are taxation incentives and the National Mortgage Guarantee system (*Nationale Hypotheek Garantie*). Until the end of 2012, home owners were able to fully deduct their interest payments on the loan they used to finance their home. This policy has been in place since 1893. This incentive is especially interesting for the higher income

householders since they have a relatively high income tax rate. The interest payments on the mortgages on your first home are tax-deductible for 30 years. This led to a trend of financing your house with borrowed money since this resulted in significant tax advantages. These tax incentives have a major impact on the Dutch housing market. The capital gains arising from increased housing prices (a trend that was present until the credit crunch) are not taxed. Nevertheless, these tax exemptions are offset by another tax called the *eigenwoningforfait*. This tax is determined as a percentage of the WOZ value of homes (European Commission, 2012). But the situation changed in 2013, a new government was elected and they decided that an interest-only loan is no longer sufficient to be eligible for tax relief (Zwart, 2012).

The second important aspect in the Dutch housing market is the National Mortgage Guarantee system (*Nationale Hypotheek Garantie*). This system was set up in 1993 to stimulate home ownership. In the Netherlands homeowners can enter in a contract to insure their risk of default (e.g., unemployment, health concerns and divorce). This arrangement reduces the credit risk for the banks and leads to lower interest rates for home owners. If a loan is not guaranteed by the National Mortgage Guarantee system the banks have to write off the debt which remains after the collateral is sold. In the end, the Dutch Government is guaranteeing this fund and this leads to the lenient credit terms (European Commission, 2012). The new government decided to lower this guarantee as of July 2013 to 290.000 EUR and to 265.000 EUR as of July 2014 (Zwart, 2012). Another aspect of the Dutch housing market is the transfer tax. This tax is being charged when a house is being purchased which was previously owned by others (SER, 2010). In July 2011, the Dutch Government decided to temporarily lower the transfer tax from 6% to 2%. As of July 2012 this rate is permanently lowered to 2% (Zwart, 2012).

## 2.2 The current role of the housing corporations

This section will contain a description of the housing corporation sector, it will cover some key numbers, the history of the housing corporations, the current structure and the associated actors will be discussed.

Dutch housing corporations are private organizations who operate under the Dutch Housing act (Koolma, 2011). Article 70 of the Dutch Housing Act is aimed specifically at the housing corporations. This article describes housing corporations as follows: associations with full legal rights, who aim to be active at providing housing. The housing act also describes the social role of the corporations. The corporations have to give priority to people for whom it is hard to find proper housing or do not have sufficient income to find affordable housing (Intraval, 2012).

### 2.2.1 Key numbers

Currently, there are 383 active housing corporations in the Netherlands (CFV, 2013a). Together they own 2.306.534 dwellings. This is almost 30% of the total dwellings in the Dutch Housing market. Next to these dwellings, the housing corporations also own other real estate objects and they count for another 183.887 units. The other real estate objects consist of offices, garages, and shopping space (CFV, 2012). The total number of housing corporations has been decreasing since the 90s due to mergers and acquisitions in the housing sector. In 2004, there were 508 corporations and this number decreased to 383 in 2013 (Intraval, 2012; CFV, 2013a). Figure 1 displays the number of housing corporations in the period 1998 until 2013.

Figure 1: the number of housing corporations in the Netherlands



Source: CFV (2010), Aedes (2012a) and CFV (2013a)

Corporations are expected that the dwellings' rent is fair for each tenant. According to the CFV (2012) a distinction can be made between three groups of renters. The first type describes the rent as fair and there is a good relation between rent and income. The second group is described as cheap skewed housing (*goedkoop scheefwonen*), in this case the tenants pay a relatively low rent. The final group is defined as expensive skewed housing, here the tenants pay a relatively high rent. The Central Housing Fund (CFV) gathers data which can be used to examine the level of each group. Table 1 shows that over 85% of the tenants pay a fair rent, 4% pays a relative low rent and over 10% pays a relatively high rent.

Table 1: the relation between rent and income in the period 2008-2011

	Amount of people	%
<b>Fair</b>	1.974.393	85,6
<b>Cheap skewed housing</b>	94.568	4,1
<b>Expensive skewed housing</b>	237.573	10,3
<b>Total</b>	2.306.534	100

Source: CFV (2012)

### 2.2.2 The start of the housing corporations

To gain insight in the current role of the housing corporations it is important to start with the history of the Dutch housing corporations. The housing corporation sector is characterized by a shifting relation between the corporations and the government. The 19<sup>th</sup> century in Western Europe was characterized by an era of industrialization. This led to great movements from the rural to the urban area and there was a large demand for housing. Around 1850, the first private initiatives started to accommodate the growing working population. These public initiatives were the start of the current housing corporations. Factory owners were the prime suppliers of these houses, they had their own interest in providing housing for their employees. At the end of the 19<sup>th</sup> century it became clear that the quality of the housing was poor (Intraval, 2012). The Dutch Housing Act (*Woningwet*) of 1901 responded to these poor housing conditions. The law formally associated the state with the supply of housing. The municipalities were obligated to develop and enforce formal zoning plans, which should facilitate the provision of facilities such as infrastructure, water, and sewerage (European Commission, 2012). The new housing act also allowed organizations to build houses with the use of public money. Next to government loans, the government also granted subsidies to these organizations in order to keep the rents low (Intraval, 2012). Initially, the corporations were largely independent but the government involvement was further enhanced in the aftermath of the Second World War. The post war period was characterized by big housing shortages and rapid population growth. As a response the government set rents substantially below the market level and subsidized large-scale construction of housing (European Commission, 2012). In 1959, a committee led by de Roos initiated a new period for the housing corporations. This committee was the start of increased independence in this sector. Nevertheless, it took several decades to accomplish this. The recommendations of the committee included:

- A debt cancellation for the housing corporations who previously had loans outstanding with the government;

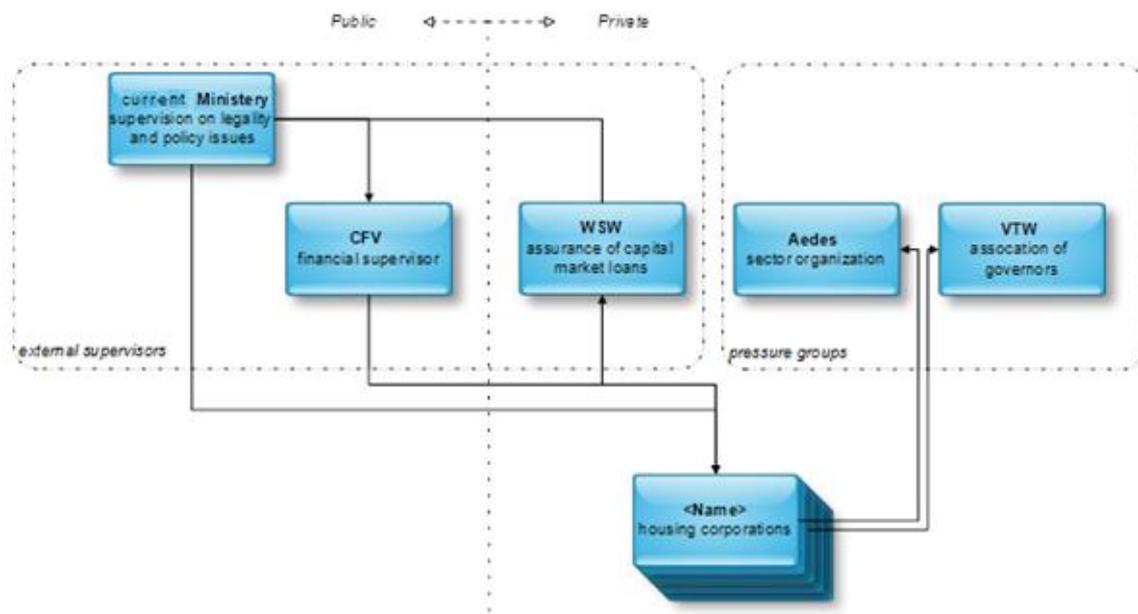
- To give housing corporations the right to keep surpluses ;
- The establishment of a central fund;
- The standardization of loan terms
- Expansion of the housing corporation's task to a higher price segment.

In line with the committee's recommendations, the Central Housing Fund (CFV) and the Guarantee fund Social Housing (WSW) were established in the 80s (Intraval, 2012). A description of the role of these actors will be given in section 2.2.3. In 1995, a crucial institutional change occurred which is called the *brutering*. The core of this institutional change is that direct subsidies from the government were abolished and in exchange the existing subsidies for housing have been traded off against state liabilities. This change led to increased financial independence and a rise of financial risks for the housing corporations (de Kam, 2007). However it is important to note that even after the *brutering* the government still plays an important role in the housing corporation sector. In 2009 and 2010 the European committee agrees that the housing corporations still receive state aid to compete unfairly in the commercial rental sector. There a multiple forms of state aid and these will be discussed in section 2.3 (European Commission, 2009; 2010).

### 2.2.3 The current structure and actors

There are several parties involved in the housing corporation sector. Figure 2 describes the current structure and its most important actors.

Figure 2: organization of the housing sector



Source: Koolma (2012)

The Dutch government sets rules regarding the housing corporations and the Ministry of Interior is charged with setting these rules and the subsequent supervision (Koolma, 2012). The rules are set through the revised Housing Act and it is expected that this new law will be effective in 2014 (Rijksoverheid, 2013a). In the 80s, the CFV and the WSW were established to reduce the role of the government and to spread the risks associated with the housing development and management between the participating housing corporations (Murie & Priemus, 1994).

The CFV was established in 1989 and the statutory basis for this fund is article 71 until 73 of the Housing Act. These articles describe the responsibilities, board structure, resources, rights and the oversight of the fund by the national government (CFV, 2013b). Article 71a makes it possible to establish an industry fund that can stimulate mutual solidarity in the rental sector. The fund is financed by fees which are charged to the members. The membership in this fund is required. The

financial resources are used to reorganize the financials of the housing corporations with little or no reserve. An important effect of this fund is the increased confidence of private investors (Murie & Priemus, 1994). The CFV is currently managed by a three person board. The members are independent experts in different fields including the real estate business, public housing finance and accountancy. The members are appointed by the Minister of Interior and they can stay active in the board for a period of maximum five years (CFV, 2013c). The proposed alteration of the housing act will have an impact on the CFV. First of all, the name will be transformed to Financial Authority Housing corporations. Next to the current tasks the new body will exercise external oversight over the housing corporations and will monitor the rules regarding state aid (VNG, 2012).

The WSW was set up by the housing corporations, the government and local authorities in order to give the housing corporations improved access to the capital market. As opposed to the CFV, the housing corporations are not obligated to participate in this guarantee fund. The housing corporations are free to arrange financing and guarantees in other ways (Murie & Priemus, 1994). The WSW provides financial assurance to investors which leads to low interest rates and sufficient lending possibilities for the housing association and the WSV monitors its members thoroughly. Due to the lenient credit terms the housing corporations are able to keep the rents low and invest on a scale which otherwise would have been impossible. Almost 91% of the current activities of the housing corporations are warranted by the WSW for an amount of €86,3 billion. As where the WSV provides assurance for the housing corporations, the Dutch government and municipalities are backing up the WSW for additional assurance. In case the WSW cannot meet their financial obligations the government and municipalities will come up with the required resources (Hoekstra, Hoogduin, & van der Schaar, 2012). In 2012, Standard and Poor's ratings services gave the WSW a triple A status and the current literature shows that 96% of the Dutch Housing corporations are a member of the SWS (SWS, 2013a; 2013b).

The CFV and the WSW are not operating independently but they complement each other. The WSW monitors the housing corporations and advises their members when there are financial problems. The advice could include better management of expenses or sales of dwellings. The SWS has some strict debt covenants and if there is a high probability of violation of these terms the SWS will advise the particular housing corporations to apply for financial aid with the CFV. If these covenants are not met the SWS will not provide assurance for its member. However, after the financial aid is granted by the CFV the SWS is again willing to provide assurance for the housing corporation (Hoekstra et al., 2012).

Another important actor is Aedes. This is the national organization of the housing corporations and they represent the interests of the housing corporations at the national level (The Hague) and the international level (Brussels). Aedes is looking for solutions which can improve the overall housing market and wants to assist in the professionalization of the sector. About 95% of all the housing corporations is a member of the national organization (Aedes, 2012b). Another party which is active in this sector is the association of governors which is called the VTW. This party was established in 2002 and its goal is to improve the internal oversight of the housing corporations. The VTW represents about 75% of the boards of governors (Koolma, 2012). So the VTW represent the interest of the boards, as where Aedes represent the interest of the tenants.

The housing corporations in the Netherlands generally have two forms of legal entities. This is either a civil law society (*vereniging*) or a foundation (*stichting*). The last several years there is a growing trend towards the adoption of a foundation. A civil law society consists of a board and has a shareholder meeting. The former is being used by the members of the association to influence the decisions which are made at the board level. A foundation has its own supervisory board and they appoint the members of the governing board. The vacancies in the former are filled by the decision of the existing members. So the State (including the municipalities) does not control the foundation (European Commission, 2009). Even though there is no shareholder meeting construction within a

foundation, the tenants of the housing corporations should still be heard. One way to achieve this is by the creation of rental organization which promotes the interests of the tenants (Intraval, 2012). Since there is no direct State ownership the Minister for housing is exercising regulations over the housing foundations and civil law societies. These powers include the possibility of sanctions in case of non-compliance with the prescribed rules (European Commission, 2009).

### **2.3 The privileged role of the housing corporations**

Housing corporations are not-for-profit organizations that operate under the Dutch Housing Act (Koolma, 2011). Their basic mission is to obtain, build and let out dwellings for disadvantaged citizens and socially less fortunate groups. Since they have a social mission the housing corporations in the Netherlands have a privileged position over the purely market real estate based parties. For their activities they benefit from four privileges:

1. State guarantees for the loans from the WSW. The housing corporations liabilities are guaranteed by the WSW and they combine the resources and power of all the housing corporations. The WSW's obligations are ultimately guaranteed by the State. It was estimated that the housing corporations are benefiting from 300 million euro on a yearly basis in the form of lower financing costs (European Commission, 2009). Hence, this measure provides the housing corporations with an advantage over purely market based parties. The state guarantees reduce the borrowing costs. This form of aid is also highly selective since it only applies to housing corporations, and it does not apply to private landlords or real estate developers. The ultimate guarantee of the government is free of charge and therefore this is seen as a transfer of state resources. So this measure selectively enhances the housing corporations' competitive position in relation to their competitors such as the private landlords and real-estate developers. Since there is a lot of cross-border investment in real

estate the group of competitors might not be limited to Dutch actors (Priemus & Gruis, 2011).

2. There is support from the CFV. There are two types of support, on the one hand there is regular project aid and on the other hand there is the rationalization aid. Regular project aid is available to housing corporations which experience financing difficulties in a particular project and this aid takes the form of a direct grant. The rationalization aid is support for housing corporations that are experiencing general financial problems and the aid can either be a soft loan or a direct grant. A soft loan refers to a loan that has more favorable conditions than a purely market based loan. The financial support from the CFV is financed from a general charge on all the associated members of the CFV. So the CFV is basically redistributing funds from one association to another (European Commission, 2009). Both types of state aid give an advantage to the housing corporations. The support of the CFV was also present in the Vestia case. Vestia got in financial problems and got support of the CFV and all the members of the CFV had to contribute to the problems with Vestia.
3. The sale of public land by municipalities at a price below market value. This form of state aid is available to housing corporations for social projects (European Commission, 2009). The municipalities in the Netherlands play a large role in the servicing of land. Even when future building land is acquired by development companies such as housing corporations they usually transfer this land back to the local municipality. The municipality will provide the infrastructure and sells the serviced land back to the development companies. The determination of the land price is calculated using the residual calculation or by a negotiation of the public and private parties. The residual calculation sets the price of land through the net present value of the all expected cash flows. The maximum price of the land is the property price less the construction costs, additional costs and a profit margin. This method is based on estimates of future costs, revenues and a discount rate, these estimated can vary

a lot between the parties (Tasan-Kok, Groetelaers, Haffner, Van der Heijden, & Korthals Altes, 2013).

4. The right to borrow from the Dutch Municipality Bank. This bank is a special purpose public bank with an outstandingly good credit rating. Only public bodies, mostly municipalities and the housing corporations can borrow from the bank. The housing corporations can obtain a loan with a favorable interest rate (European Commission, 2009). The good credit rating of the Dutch Municipality Bank can only be sustained under the assumption that the Dutch Government will support this bank in case of distress. At the end of the 2010, the Dutch housing corporations had loans outstanding at this bank for a total amount of 40 billion euro (European Commission, 2012). The favorable interest rate gives the housing corporations another privilege over the purely market based firms.

Housing corporations are not-for-profit organizations and they have social objectives which justify their privileges. Next to the social objectives and activities, Czischke and Gruis (2007) see a growing trend of an increased application of business principles within the (social) housing management, as well as a broadening of the services provided by the housing corporations. There is an increased market orientation and this leads to more activity on the commercial segment (Gruis, 2008; 2012). These trends are also recognized by other researchers, the housing corporations are becoming more market based (e.g., Brandsen, Farnell, & Ribeiro, 2006b; Gilmour, 2009; Hoekstra, et al., 2012; Jacobs et al., 2010). These commercial activities include construction and renting out apartments with higher rents, construction of apartments for sale, construction and let out of public purpose buildings including cultural and health centers, the construction and let out of commercial premises, construct and maintain parks and other local infrastructure. The housing corporations usually act as developers. They are responsible for the entire project, from the beginning until the end. The activities could consist of market research, feasibility studies, due diligence, property acquisition, financing, construction, and maintenance. Though, most housing corporations employ

subcontractors. The role of housing corporations is then more of supervision, coordination and management (European Commission, 2009).

In conclusion, chapter two gave an overview of the housing market in the Netherlands, in addition this chapter covered some key numbers, the history, the structure and the associated actors which are involved with the housing corporations. This chapter ended with the privileged role of the housing corporations in the Netherlands. In the next chapter, the institutional framework will be introduced and this framework will be used to explain the privileged position of the housing corporations.

### III The institutional framework

This chapter will describe the institutional framework, and this consists of a framework of the public, private, and the third sector. Or in the words of Streeck and Schmitter (1985) this chapter will describe the institutional framework of social order. This general introduction to the institutional theory will be used to place the housing corporations in this framework. The next section (3.2) will cover specific elements of housing corporations in the public, private, and third sphere. The chapter will end with the positioning of the housing corporations in the conceptual framework.

#### 3.1 Public, private, and the third sector

The first two principles of the public and private sector are well known to everybody, as where the third sector might be less known to the public. The third sector is also commonly referred to as the non-profit, voluntary, community or non-governmental sector. This section will elaborate on the three aspects of public, private, and the third sector. I will present the ideal typical characteristics of each of these (Billis, 2010b).

Table 2: Core elements of the public, private, and the third sector

<b>Core elements</b>	<b><u>Public sector</u> principles</b>	<b><u>Private sector principles</u></b>	<b><u>The third sector</u> principles</b>
<b>1. Domain</b>	State	Market	Community
<b>2. Ownership</b>	Citizens	Shareholders	Members
<b>3. Governance</b>	Public elections	Share ownership size	Private elections
<b>4. Guiding principle</b>	Public service and collective choice	Market forces and individual forces	Commitment about distinctive mission
<b>5. Human resources</b>	Paid public servants in legally backed bureau	Paid employees in managerially controlled firm	Members and volunteers in association

<b>6. Recourses</b>	Taxes	Sales, fees	Dues, donations and legacies
<b>7. Activities</b>	Public duties	Commercial activities	Social activities
<b>8. Value orientation and central values</b>	Public values, legitimacy, loyalty, sense of honour, absence of pursuit of profit	Economic values, entrepreneurship, innovation, willingness to take risk, respect for contracts and investment aimed at survival	Social values , solidarity, trust, responsibility, dignity, justice
<b>Examples</b>	Dutch Government	Deloitte, Rabobank, KLM	Pink Ribbon, Warchild

Source: based on Billis, 2010b; Streeck & Schmitter, 1985; and van der Torre, Fenger, & van Twist, 2012.

The above table leads to the following description of the three spheres. The public sector is active in the state domain (1) and is owned by citizens (2) and governed according to the principles of public elections (3) with work driven by the principles of public service and collective choice (4). The primary human resources consist of paid public servants (5) in a legally backed bureau and are being paid through taxation (6). Their activities are aimed at public duties (7) where legitimacy, loyalty, sense of honor, absence of pursuit of profit and public values (8) are important (Billis, 2010b).

The private sector is active in the market domain (1) and is owned by shareholders (2) and governed according to the principle of size of share ownership (3), with work driven by the principles of market forces in individual choice (4) . The primary human resources consist of paid employees in a managerially controlled firm (5) are being paid through sales and fees (6). Their activities are aimed at commercial activities (7) where entrepreneurship, innovation, willingness to take risk, respect for contracts and investment aimed at survival and economic values (8) are important (Billis, 2010b).

The third sector is in the community domain (1) and is owned by their members (2) and governed according to the principle of private elections (3) with work driven by the commitment about a distinctive mission (4). The primary human resources consist of members and volunteers in an association (5) and are being paid through dues, donations and legacies (6). Their activities are aimed at social activities (7) where solidarity, trust, responsibility, dignity, justice and social values (8) are important (Billis, 2010b).

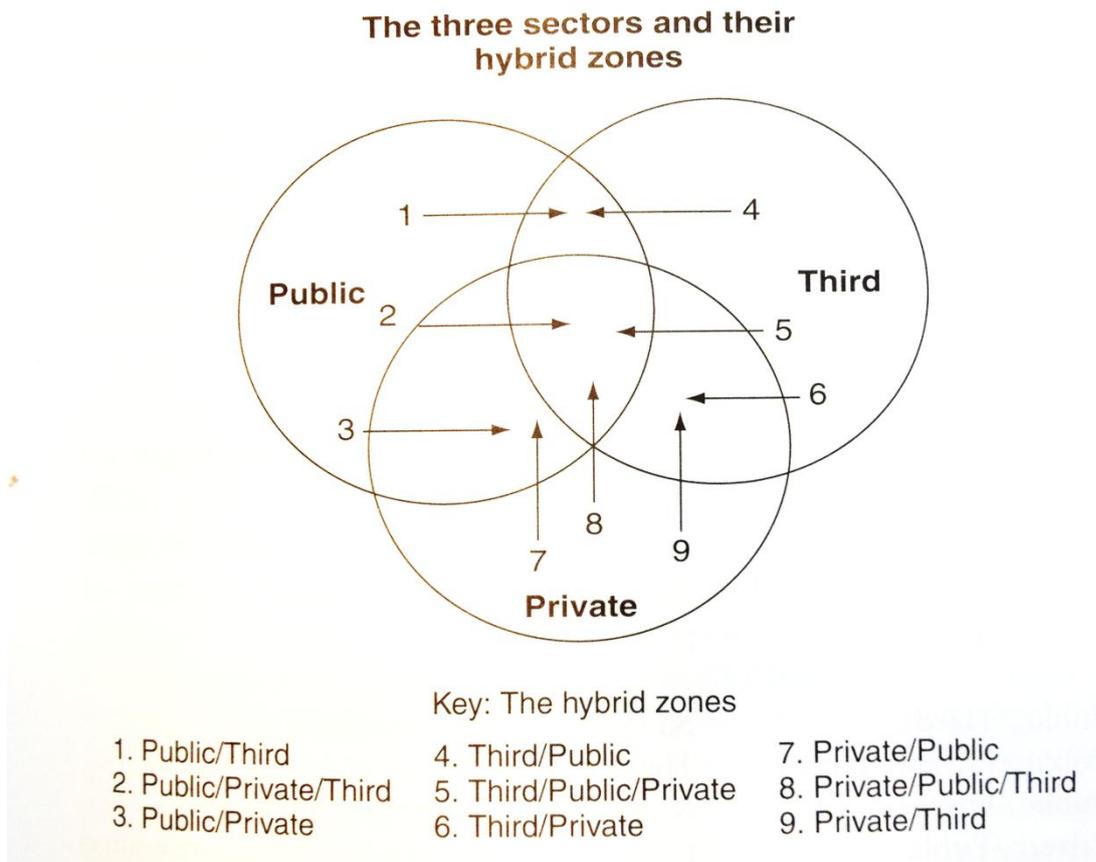
The three spheres are now described as three different parts, however modern societies, polities or economies can only be analyzed as a mixture of the three or in other words, as a hybrid form (Streeck and Schmitter, 1985). Hybrid organizations are long recognized in the literature and this goes back as far as 1953 with the publication of Dahl and Lindblom (1953). The current academic disciplines of public administration and organization sciences recognize that there is an extensive group of organizations that does not fit in the above pure type categories of the public, private or third sector and they recognize there is a group of organizations that is a combination of the three (Billis, 2010a; Brandsen et al., 2006c; Minkoff, 2002; van Twist & In 't Veld, 1999)(Van der Torre et al., 2012).

In the academic literature there are two approaches that characterize hybrid organizations. The first approach classifies organizations as hybrid when they mix the elements of public and private organizations or when the organization is located between the public and private sector (e.g., Emmert, & Crow, 1988; Karré, 2011; Kickert, 2001; Koppel 2003, 2007; Ménard, 2004; Perry, & Rainey, 1988; van Twist, & In 't Veld, 1999). In this approach there are two extremes which are the public agency and the private enterprise (Van der Torre et al., 2012). The second approach understands hybrid organizations as organizations between the public, private, and third sector (e.g., Billis, 2010a, 2010b; Brandsen, Van de Donk, & Putters, 2005; Evers, 2005; Pestoff, 1992). Hence the hybrid organizations combine elements of the public, private, and third sector organizations (Van der Torre et al., 2012). So the main difference between these two approaches is the presence of the third

sector. The first approach only covers two spheres (the public and private) as where the second approach examines three spheres (public, private, and third sector).

In my thesis I build upon the second approach. There are a few reasons for this choice. First of all, the second approach is more specific as it allows a third sector to be included in the analysis. If a hybrid organization can be characterized as a mix of elements of the public and private sector this fits perfectly in both approaches, however when an organization is a mixture of the three spheres the first approach is not applicable. Secondly, after reading a lot of literature on this topic (e.g., Blessing ,2012; Streeck & Schmitter, 1985; Van der Torre et al., 2012) and my course on institutional perspectives at the Radboud University Nijmegen I am convinced that that the third sector should be included and therefore I choose the second approach. Another reason is that the third sector is so distinctive of the two other spheres in multiple aspects, as can be seen in table 2 and therefore I use the second approach. The first approach is too limited in scope to be applied to the Dutch housing corporations. Therefore the second approach is being applied. The second approach understands hybrid organizations as an organization between the public, private, and third sector (Van der Torre et al., 2012). Hybrid organizations are often being labeled as the blurring of public, private and the third sector. This is however a vague description and in this section I move beyond this vague description and I adopt a conceptual approach to hybridity (Billis, 2010a). This results in the following figure 3.

Figure 3: the different hybrid zones



Source: Billis 2010b

The above figure shows there are three spheres (public, private, and third) and there could be an overlap of each of these spheres resulting in a hybrid form. A few side notes have to be made regarding figure 3. First of all, it is important to note that the size and position of each circle is not intended to reflect the size of resources or impact of these three sectors in different countries. Secondly, the figure shows that there are three zones of hybridity. Furthermore, it is important to note that this figure is static and does not represent the possible movement in or out one of the four hybrid zones (Billis, 2010b).

### 3.2 Housing corporations as a hybrid organization

Housing corporations can be seen as hybrid organizations since they do not fall into one specific sphere of the public, private or the third sector (e.g., Billis, 2010b; Brandsen, 2006a; Brandsen & Karré, 2010; de Kam, 2007; Gilmour, 2009; IntraVal, 2010; Mullins, 2010; Priemus, 2001, 2003). This

section will discuss the hybrid form of housing corporations in relation to the public, private, and third sector characteristics. Or in other words, it describes specific elements of the housing corporations and I will use table 2 (on pg 24 & 25) to place these elements in the proper sphere. Some characteristics of the housing corporations belong to the public sector as where other characteristics better fit into the third sector. After each specific element I will place a number behind the sentence in order to make it clear where this characteristic fits in table 2. For example, the social mission of the housing corporations fits under number 7 & 8 of the third sector principles. I will end this section with the positioning of the housing corporations in the conceptual approach (based on Billis 2010b) as presented in figure 2. I will start with the public aspects of the housing corporations.

### **3.2.1 The public aspects of hybridity**

An important determinant of the public hybridity has been the financing possibilities of the Dutch housing corporations. Until 1995, the Dutch housing associations were directly funded by government and nowadays they still have privileges over purely market based firms and these consist of state guarantees for the loans from the WSW, support from the CFV, the availability of public land below market value and the right to borrow from the Dutch Municipality Bank (European Commission, 2009; 2010). More detailed information on these privileges can be found in section 2.3. The rising property values over the decade from 1995 and onwards have supported the Dutch housing corporations to develop a strong housing market foothold and nowadays they are less dependent on the government than before 1995 (de Kam, 2007). The four forms of state aid can be seen as link of the government with the housing corporations. This relates to number one in table 2.

The government wants to steer the housing corporations and therefore they are imposing taxes on the social as well as the commercial activities of the corporations (Billies, 2010b). This is the so called rental tax (*verhuurdersheffing*). This is a general tax, which is applicable to house lords who have more than 10 properties. As of January 2013, this tax is 0,231% over the value of the properties. The

rental tax is not only applicable to housing corporations but also to other parties who own more than 10 properties (Rijksoverheid, 2013b). As a result the housing corporations have to pay approximately €1.7 billion each year (Stec Groep, 2013). The imposed tax on the housing corporations is specific for the rental sector and this implies an important link with the government, with respect to table 2 this can be seen as an additional resource of the government and this relates to number six.

Another aspect that characterizes the role of the government within the housing corporations sector is the rent setting. In the Netherlands, the State is determining the level of rent and 98% of the dwellings that are operated by the housing corporations are under this rent control of the government (de Kam, 2007; European Commission, 2009). The rent control applies to both the private and the social sectors (European Commission, 2012). The rent setting is another link of the government with the housing corporations and this can be best characterized as state influence over the housing corporations under number one in table 2.

### **3.2.2 The private aspects of hybridity**

The most important market based aspect of hybridity is the focus on commercial activities next to their social activities (e.g., Brandsen, Farnell, & Ribeiro, 2006b; European Commission, 2009; and Czischke, & Gruis, 2007). The former see a growing trend of an increased application of professional principles within the (social) housing management, as well as a broadening of the services provided by the housing corporations. There is an increased market orientation and this leads to more activity on the commercial segment (Gruis, 2008). These trends are also recognized by other researchers, the housing corporations are becoming more market based (e.g., Brandsen, Farnell, & Ribeiro, 2006b; Gilmour, 2009; Hoekstra, et al., 2012; Jacobs et al., 2010; Koolma, 2012). Or in the words of Boelhouwer (1999) and Priemus, & Dieleman (2002) there is a shift away from government control towards the reinforcement of market principles (Gilmour, 2009). These trends obviously relate to the market aspects of the housing corporation, with respect to table 2 this relates to number one, four and seven.

Consequently, the housing corporations moved to adapt to more businesslike approaches in their management and the increase in merger activities can be seen as part of this development (van Bortel, Mullins, & Gruis, 2010). In 1997, there were 767 corporations and this number decreased to 383 in 2013 (Intraval, 2012; CFV, 2013a; van Bortel et al., 2010). Figure 1 in section 2.2.1 displays the number of housing corporations in the period from 1998 until 2013. The main drivers of these merges are aimed at an increased value for money, improved efficiency, professionalization, creating economies of scale and to be a more powerful entity with a greater ability to survive in a fast moving sector. The increased rate of mergers can be seen as a more market based approach of the housing corporations, the increase is related to number four in table 2 (van Bortel et al., 2010).

### 3.2.3 The third sector aspects of hybridity

The most significant third sector aspect of hybridity is the commitment about a distinctive mission within the housing corporations. The primary goal of the housing corporations is to obtain, build and let out dwellings for the disadvantaged citizens and socially less fortunate groups (Koolma, 2011). This can be seen back in the vision and mission of several housing corporations in the Netherlands. For example a housing corporation in the Netherlands with the name BrabantWonen has the following mission: *“BrabantWonen daagt uit, inspireert en jaagt aan. En desnoods duwen en trekken we in het belang van goed wonen en leven van onze klanten. Het gaat niet alleen om goed wonen, ook om goed leven. Corporaties zijn honderd jaar geleden ontstaan om aan de sociale vraagstukken van toen te werken, nu gaat het om de sociale vraagstukken van dit moment. Dat reikt verder dan alleen wonen”* (BrabantWonen, 2011, pg 11). This could be translated in English as follows, BrabantWonen challenges, inspires, and boosts. When necessary, we push and pull in the name of good living and a proper life for our customers. It is not just about proper living but also about a suitable life. Corporations are around for 100 years to answer to social issues and nowadays we are still concerned with the current social issues. These issues are not just about good living.

Additionally, I randomly selected six corporations out of the CFV database. Similar mission statements about their social mission can be found in other annual reports (e.g., Wel Wonen, 2011; Woonstichting 't Heem, 2011; Woonstichting Volksbelang, 2011; 3B Wonen, 2011; Rochdale, 2011; Woningstichting Den Helder, 2011a ). A corporation called "Woningstichting Den Helder" even had a separate annual report (Woonstichting Den Helder, 2011b) which was focused solely on their effort in the local community, emphasizing the social role of the housing corporation. An important third sector aspect is the commitment about a distinctive mission and relates to number four and eight in table 2.

Another aspect which is apparent in most of these annual reports is the use of volunteers within the housing corporations. (e.g., BrabantWonen, 2011; Woonstichting Den Helder, 2011b; Woonstichting 't Heem, 2011; Woonstichting Volksbelang, 2011). In the case of BrabantWonen there was a new idea called the living room concept. This is a new initiative started by BrabantWonen and launched in 2012. Together with volunteers they opened a living room where children of the age of 10 until 14 are able to socialize in order to keep them off the street (BrabantWonen, 2011). The use of volunteers relates to number five in table 2.

A final aspect is the current structure of the housing corporations. The last several years there is a growing trend towards the adoption of foundation. The direct involvement of members is not applicable anymore to this type of entity. However, the members of the housing corporations are still being heard and the participation of the members is laid down in the Consultation Act (*Overlegwet*). The tenants are participating in different ways, first of all as an individual resident of the dwelling they rent. The tenants and housing corporations each have specific rights and duties (Ouweland, & Van Daalen, 2002). Furthermore, tenants can organize themselves by the creation of a rental organization which promotes the interests of the tenants (Intraval, 2012). The housing corporations have a legal obligation to involve these organizations in the decision-making process. The tenants can also create or join an organization that looks after their interests at a municipal, national or

international level. One example of a national and international organization is Aedes (Ouweland, & Van Daalen, 2002). The aspect of the indirectly involved members relates to number five in table 2. The above three sections can be summarized in the following table 3.

**Table 3: core elements of the public, private, and the third sector applied to the housing corporations**

Sector	Characterizations
<b>Public (state)</b>	<ul style="list-style-type: none"> <li>- Four forms of state aid (1)</li> <li>- Rental tax (6)</li> <li>- Rent is controlled by the government (1)</li> </ul>
<b>Private (market)</b>	<ul style="list-style-type: none"> <li>- Increased application of businesslike principles (1,4,7)</li> <li>- Increased commercial activities (1,4,7)</li> <li>- Increased level of mergers (4)</li> </ul>
<b>Third sector</b>	<ul style="list-style-type: none"> <li>- Distinctive social mission (4,8)</li> <li>- Volunteers (5)</li> <li>- Member involvement (5)</li> </ul>

Source: based on Billis, 2010b; Streeck & Schmitter, 1985; and van der Torre, Fenger, & van Twist, 2012

Note: The number(s) behind each characteristic relate to the numbers in table 2

The above table summarizes each specific element of the housing corporations and places this in either the public, private or third sector. The numbers which are in brackets are based on table 2 of page 24 and 25. For example, number 5 refers to the core element of human resources in table 2. In the case of the housing corporations, volunteers are an important element of the human resources. The next section will position the housing corporations in the conceptual framework.

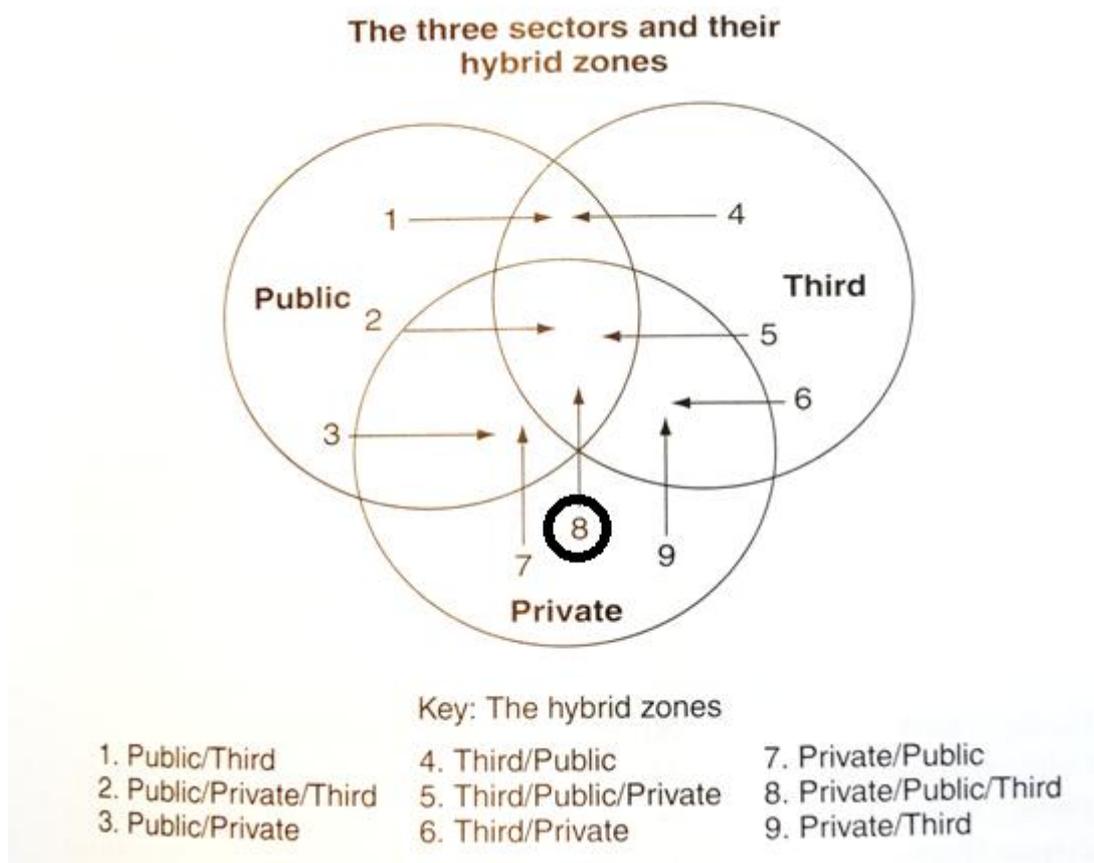
### 3.3 The positioning of the housing corporations in the conceptual framework

As becomes clear from the previous section (3.2), it is not possible to place the housing corporations in one of the three particular spheres. The housing corporations in the Netherlands each have specific elements which are only applicable to one of the three sectors. Therefore I conclude that housing corporations can be seen as a hybrid entity, this is also confirmed by other research (e.g., Billis, 2010b; Brandsen, 2006a; Brandsen & Karré, 2010; de Kam, 2007; Gilmour, 2009; Intraval, 2010; Mullins, 2010; Priemus, 2001, 2003). This hybrid entity can also be placed in the conceptual framework which was elaborated on in section 3.1. To adequately express the position of the housing corporations in the institutional framework I use the number eight in figure 3. This statement implies that all the housing corporations are the same but in reality there are of course differences within the housing corporations and these differences will be the subject of my sub analyses. In my sub analyses I will examine the differences *within* the housing corporation sector and I check whether a distinctive social mission, the involvement of members and the use of volunteers can be associated with a high or low level of abusive behavior.

The main reason for the housing corporations as a number eight is the emphasis on the increased application of businesslike principles and increased commercial activities and this can also be seen back in the rise of mergers. A significant part of my literature study observes the increased business like principles and much is written about this trend (e.g., Boelhouwer, 1999; Brandsen, Farnell, & Ribeiro, 2006b; Czischke, & Gruis, 2007; de Kam, 2007; Gruis, 2008; European Commission, 2009; Gilmour, 2009; Hoekstra, et al., 2012; Jacobs et al., 2010; Koolma, 2012, and Priemus, & Dieleman, 2002). The third sector characteristics are also present within the current housing corporations in the Netherlands, they have a distinctive mission and they involve their members and volunteers (e.g., BrabantWonen, 2011; Wel Wonen, 2011; Ouwehand, & Van Daalen, 2002). Furthermore, the housing corporations are still linked to the government through several aspects such as the rental tax, the

rent control and the privileged position (e.g., Billis, 2010b; de Kam, 2007; European Commission, 2009, 2010; Rijksoverheid, 2013b). This leads to the following positioning of the housing corporations in the institutional framework.

Figure 4: the Dutch housing association as a hybrid entity



Source: based on Billis 2010b

Figure 4 places the housing corporations in the Netherlands in the conceptual framework which was elaborated on in section 3.1. The housing corporations are seen as a hybrid entity where the private sphere is the most important and to adequately express this the number eight is used. The numbers 1 and 4 appear to be same, this is not the case. In the case of number 1, the public sector influence is more severe than that of the third sector. The next chapter will elaborate on the link between the (privileged) position of the housing corporations (chapter 2), the market based firms, the institutional framework (chapter 3), and the use of earnings management as a financial criterion.

## IV Earnings management as a financial criterion

The previous chapter places the Dutch housing corporations in an institutional framework as a hybrid entity. The housing corporations in the Netherlands have different aspects of the public, private and third sector. The third sector is characterized by a distinctive social mission, the use of volunteers and involvement of their members. Since housing corporations have a social mission you would expect that these companies behave differently than purely market based firms. Housing corporations are expected to act in line with this social mission. The third sector elements justify why the housing corporations have a privileged position over the purely market based firms. The government grants the housing corporations four distinct privileges such as state guarantees for the loans from the WSW, support from the CFV, the sale of public land by municipalities at a price below market value and the right to borrow from the Dutch Municipality Bank.

Since the housing corporations have a social mission you expect them to act in line with this social mission and behave accordingly. This means that it is expected that they act ethically, so they behave in a way which is consistent with good values and principles. You expect the housing corporations to fairly present their financial statements and in accordance with the law and accounting rules. Nevertheless, in the introduction it became clear that there was abusive behavior at one specific housing association. Vestia did not use their derivatives in line with the law and this was a violation of the law and accounting rules (Verbraeken, & Piersma, 2013). Vestia tried to portray a rosy picture of their performance by using the limitations of the accounting rules. This is also called earnings management. Earnings management happens when managers use their judgment in financial reporting and in structuring transactions to modify financial reports to either mislead stakeholders or to influence contractual outcomes that depend on the reported accounting numbers (Healy & Wahlen, 1999). The use of earnings management can be applied to Vestia, the management made use of the accounting limitations to report accounting numbers that did not reflect their true economic performance (Verbraeken, & Piersma, 2013). Vestia is just one of the 383 housing

corporations in the Netherlands and this behavior does not have to apply to all housing corporations in the Netherlands.

In this thesis I want to study the possible different behavior of the housing corporations and purely market based firms by looking at the level of earnings management. I want to use the level of earnings management as a financial criterion to examine whether the privileged position of the housing corporations is justified. If earnings management is found this is not in line with the housing corporations' social behavior and this might be a reason to rethink the position of the housing corporations. I want to examine the level of earnings management with an OLS regression. I use financial data for both types and run a linear regression to determine which of the two parties applies more earnings management. Before I start with my analyses, it is important to explain the concept of earnings management and the motivations of managers to engage in earnings management.

#### **4.1 Earnings management**

*“Earnings management is the choice by a manager of accounting policies, or actions affecting earnings, so as to achieve some specific reporting objective”* (Scott, 2008, pg. 403). This definition needs some more explanation. The definition implies there are two types of earnings management. The first type includes the choice of accounting policy and the second type is concerned with real actions. The choice of accounting policy can be interpreted broadly, and this can be divided in two categories. The first is the choice of the accounting policy per se, for example whether we use LIFO or FIFO accounting for the inventory, or the policies for revenue recognition. These are also called non-discretionary accruals. The second category are discretionary accruals, these include warranty costs, inventory value, extraordinary items such as write offs. The former examples all imply the use of judgment in order to come to the right financial number and this can be used to manipulate the earnings. In the case of housing corporations managers can choose certain policies how to write off

their dwellings or they can decide what the current value of their houses in and adjust these upwards or downwards (Scott, 2008, pg., 403).

The second type of earnings management is the use of real variables to boost earnings. Examples of real variables are advertising, R&D, maintenance, the time of purchase and assets disposal, and credit terms. It is important to note that this type of earnings management can have severe consequences. All these variables directly affect the firm's long term interests, it can be beneficial for the short term to decrease maintenance however this will have a severe impact on the long term value of the property. But why are managers interested in applying earnings management? The next section will discuss the motivations for earnings management (Scott, 2008, pg., 404)

## **4.2 The motivations for earnings management**

The motivations for earnings are summarized by several authors such as Healy, & Wahlen (1999), Dechow, & Skinner (2000), Fields, Lys, & Vincent (2001), and Scott (2008). The motivations for earnings management are as follows: employee bonuses, bond covenants, stakeholder motivations, career concerns, and stock price motivations (Graham, Harvey, & Rajgopal, 2005). Each of these motivations will be shortly elaborated on.

An important motivation to apply earnings management is related to bonuses. The literature argues that managers use earnings management in order to maximize their bonus compensation, a paper by Healy (1985) was the first to examine whether there was earnings management for bonuses purposes. More research was conducted (e.g., Holthausen, Larcker, & Sloan; 1995; Matsunaga, & Park, 2001; and see Fields et al., for additional references) and there is significant evidence that there is earnings management by managers to influence their bonuses (Scott, 2008)

The possible violation of debt covenants is another motivation to apply earnings management. A debt contract usually depends on accounting variables and includes several covenants. Given that a violation of the covenant can have severe consequences for the firm, managers are expected to

avoid these violations (Scott, 2008, pg., 411-412). Some examples of research into this topic are e.g., DeFond, & Jiambalvo, 1994; Kim, Lisic, Myers, & Pevzner, 2011; Sweeney, 1994; Watts, & Zimmerman, 1990.

Burgstahler and Dichev (1997) conducted research into another motivation which are the stakeholder motivations. These authors found that by managing earnings, firms are able to maintain their reputation with the stakeholders and this leads to improved trade terms with their suppliers and creditors. The studies by Graham et al., (2005) and Bowen, Ducharme, Shores (1995) confirm these findings (Graham et al., 2005).

Another motivation which is gaining more attention in the academic literature are the career concerns of the manager. The survey by Graham et al. (2005) shows that about 75% of all interviewed managers believe it is important to hit certain earnings targets. They believe that not hitting their targets is seen by the managerial labor market as a managerial failure and this could have significant impacts for possible new jobs (Graham et al., 2005).

A final motivation which could lead to the application of earnings management is a stock price motivation. The literature shows that the market cares about hitting earnings benchmarks. For example, Bart, Elliot, & Finn (1999) show that the market pays a premium stock price for firms that report continuous growth (Graham et al., 2005). Firms that fail to meet their earning benchmark are punished by the market and first that fail to meet expectations suffer a severe drop in share prices (Scott, 2008, pg., 413). More background information on the several motivations can be found in Dechow, & Skinner (2000), Fields et al., (2001), Graham et al., (2005) Healy, & Wahlen (1999) and Scott (2008).

### 4.3 Earnings management and housing corporations

The previous section described five motivations for managers to use earnings management and included employee bonuses, bond covenants, stakeholder motivations, career concerns, and stock price motivations (Graham, Harvey, & Rajgopal, 2005). In the economic literature there is much information to be found on earnings management. However there is, to the best of knowledge, nothing specifically written about the motivations for earning management among housing corporations. This does not mean that nothing can be said about the use of earnings management among housing corporations. Since the housing corporations are well represented in the third sector (distinctive social mission, use of volunteers and member involvement) you expect they will also behave accordingly. Nevertheless some of these motivations for engaging in earnings management could be applied to the housing corporations.

One important motivation to apply earnings management that is specific for housing corporations is related to a possible violation of debt covenants. The housing corporations in the Netherlands can borrow money from the WSW at the best possible terms and this is accomplished by issuing guarantees. Generally speaking, all registered housing corporations can become a member of the WSW, however due to the large general and financial interests certain (financial) conditions have to be met (Ouwehand, & van Daalen, 2002). If these financial conditions are not met the housing corporations are not able to benefit from the lenient credit terms and therefore might engage in earnings management.

Another possible reason to apply earnings management is related to career concerns of management. These concerns occur when the labor market uses the current output of the management to update the belief about the management's capabilities. The managers want to show that they are capable of properly running a company and making a profit (Demers, & Wang, 2010). This could also be applied to managers of housing corporations, one could expect that these managers also want to show that there able to properly run a business.

To conclude, this chapter links the (privileged) position of the housing corporations, the institutional framework and the use of earnings management. Furthermore, it shortly describes what earnings management is, and the different motivations of why managers could engage in earnings management. Housing corporations are expected to behave accordingly due to their social goals, nevertheless Vestia did show some abusive behavior. After these theoretical considerations, the next chapter will discuss my research method.

## V Research method

This chapter contains my research design, the description of the data, the description of the sample and the proxies which I use to examine the level of earnings management among the housing corporations and the market based parties.

### 5.1 Research design

The research design in this thesis consists of quantitative research and qualitative methods. I start with a general description of both research methods and I describe two important aspects of research which are validity and reliability. After this general description I apply these aspects to my own research.

Quantitative research is typically associated with a deductive approach, where the focus is on using data to test hypotheses and theory. This type of research examines the relationship between variables, which are measured numerically and analyzed using different statistical techniques (Saunders et al., 2012, pg 162). Quantitative research usually examines a large group and the data that is used is based on precise measurements using structured and validated data collection techniques. The use of objectivity is critical in the case of quantitative research, the role of the researcher is to be distant from the cases being studied. The results of quantitative research are used to generalize the findings to the population. The focus of quantitative research is on specific hypotheses and a common result of quantitative research is a statistical report that contains information about the hypothesis that is being examined (Johnson, Christensen, 2008, pg 34; Lichtman, 2006, pg 7-8; Xavier, 2012).

Qualitative research is typically linked with an interpretive approach. This type of research is interpretive because you need to make sense of the subjective and socially constructed aspects which tell you something about the phenomenon that is being studied (Saunders et al., 2012, pg

163). This type of research studies participant's meanings and the relationships between them, using a diverse set of data collection techniques and procedures (Saunders et al., 2012, pg 163). Qualitative research usually examines a small group and the data that is used is based on qualitative data such as open-ended responses, interviews, observations and documents. As opposed to quantitative research it is expected that subjectivity is used. The results of qualitative research are more specific and the findings are less generalizable than quantitative research. Usually, the final report has a contextual description and includes direct quotations from the data being used (Johnson, Christensen, 2008, pg 34; Lichtman, 2006, pg 7-8; Xavier, 2012).

Two important cornerstones of scientific research are validity and reliability. Reliability relates to whether the data collection techniques and procedures would produce consistent findings if they were conducted by another researcher. (Saunders et al., 2012, pg 191, 192). Reliability by itself is not sufficient to ensure a high quality research design. Validity is also an important aspect of a high quality research design. There are two types of validity which are internal validity and external validity. Internal validity is established when the research shows a causal relationship between two variables (Saunders et al., 2012, pg 193). External validity is related to the generalizability, can the findings of the research be generalized? (Saunders et al., 2012, pg 194).

In this thesis, I conduct quantitative and qualitative research to answer my research question. My research question is as follows: what is the role of the housing corporations in the Dutch housing market and can a case be made for its privileged position on the grounds of financial criteria? The research question relates to all the housing corporations in the Netherlands. Generally speaking, quantitative research has a high external validity and therefore I choose this type of research method. Using a sample of the housing corporations and the market based firms I generalize the findings to the population. More specifically I conduct a T-test and an OLS regression to answer this research question. The T-test is used to see whether a housing corporation or a market based party engages more in earnings managements. The limitation of the T-test is that only two variables are

examined. Subsequently, I choose for an OLS regression to overcome this limitation. By using regression analysis with multiple independent variables I answer my research question by testing the likelihood of earnings management among housing corporations and purely market based firms (Saunders et al., 2012, pg 508). A regression analysis enables the researcher to assess the strength of the relation between a dependent variable and one or more independent variables. (Saunders et al., 2012, pg 523). In my research the dependent variable is the level of earnings management. The independent variable will be a dummy variable and the dummy describes whether the company is either a housing corporation or a market based firm. The other independent variables are my control variables and these consist of size, growth, and profitability. These are elaborated on in section 5.3.3

In this thesis I also conduct a sub analysis by using a qualitative research method, more specifically I conduct archival research. This strategy makes use of administrative records and documents as the principal sources of data. Archival research allows the researcher to answer a research question, however this is often exploratory, descriptive or explanatory (Saunders et al., 2012, pg 178-179). In my sub analysis I want to go more in depth about the level of earnings management *within* the housing corporation sector. In this analysis I do not make a comparison between the housing corporations and the purely market based firms, but I look at differences within the housing corporation section.

In chapter two it became clear that housing corporations are hybrid entities between the state, market and the third sector. In the literature, the housing corporations are characterized by several third sector elements such as a distinctive social mission, the involvement of members and the use of volunteers (see also table 3 on page 31). Since the housing corporations have a social mission you expect them to act in line with this social mission. I want to examine whether this social mission, the involvement of members and the use of volunteers actually has an impact on the level of earnings management of the housing corporations. So the aim of this analysis is to examine whether housing corporations with the lowest level of earnings management are actually characterized by a distinctive

social mission, the involvement of members, and the use of volunteers and whether housing corporations with the highest level of earnings management are less well represented by these third sector characteristics. I select five housing corporations with the highest level of earnings management and I select five housing corporations with the lowest level of earnings management. After this selection, the 2011 annual report of each housing corporation is analyzed and I check whether these corporations actually have a distinctive social mission, actually involve members and make use of volunteers. I use the 2011 annual report for consistency reasons since I also examine the level of earnings management in 2011. I obtain all the annual reports through the housing corporations' website. The analysis starts with the search for the mission statement. When this is not available I search for the vision or strategy explanation in the annual report. If none of these aspects are found I search through the annual report for indicators of a social mission. As for the involvement of their tenants I search for committees and read through the annual report to detect signs of cooperation with the tenants. The same applies to the use of volunteers. The next section discusses the database I use for my quantitative research and a description of the sample which is used for my qualitative research.

## **5.2 Data and sample**

The data for this research is gathered using the Orbis Database which is provided by Bureau van Dijk. The data is accessed through the Radboud University's library services. The University has several databases which are accessible for their students, including the Orbis Database. The Orbis database provides key financial information for public and private firms across the globe. It contains information for more than 100 million companies worldwide. The company works with the best information providers and maintains a strong relation with them. Orbis places a large emphasis on private, non-listed companies and can be used to select companies with a specific profile such as housing corporations. These characteristics make the use of database very relevant and applicable for my research. Orbis monitors their data quality by using several pillars such as coverage,

timeliness, accuracy, usability, and relevance (Orbis, 2012). Orbis was also known as the Amedeus database but changed names to Orbis. The research data in Orbis is available from 2002 until 2012. The Orbis database contains all the financial information I need to test for the level of earnings management among the housing corporations and purely market based parties.

I use the CFV (2013a) website to find all the names of the Dutch housing corporations and I use this input in the Orbis Database. The initial sample consisted of 386 housing corporations and this number was reduced to 167 housing corporations due to data limitations. This has some implications for my sample, ideally I had the data for all the housing associations however this was not available and therefore I was only able to research this sample. The sample is close to 45% of the total population. I try to perform some additional checks to see whether a particular segment of the housing corporations is missing in the sample. I use my control variables to examine whether there are differences for the population and the sample. I found that the entire population has higher growth, the same profitability and on average the housing corporations of the entire population are bigger. So the sample I use in this research does not contain the bigger and high growing companies.

In order to use my earnings management proxies I need specific accounts, which were not available for all the housing corporations and therefore my sample only contains 45% of the population. For example, I needed sales data and my sample was reduced by 50% since Orbis did not provide sales data for half of the housing corporations. Next to this, to compute the earnings management proxies I need data from at least three years since parts of the real earnings management equation use three data points, such as equation (2). So I need data for 2011, 2010, and 2009 to compute my earnings management proxy for 2011.

Next to data from the housing corporations I also need data for market based parties in order to answer my research question. I need this data to make a comparison between housing corporations and market based parties. I want to examine whether there are differences in the level of earnings management among housing corporations and market based parties. The Orbis database provides

industry numbers which are used to identify in which industry a company is operating. The specific industry tags are NACE Rev 2. Codes. The use of these codes has a consequence for my sample. In order to make a good comparison I try to create a database that has a good basis to answer my research question. The use of these specific codes has an influence on my sample. If I selected a broader range of industry tags this could result in a different sample. The main industry tags of the housing corporation were 6820 (renting and operating of own or leased real estate) and 4110 (development of building projects). Since the housing corporations use these two specific codes, I also use these codes to identify the proper peer group. I started with all the companies in the Netherlands and used the industry code 6820 and 4110 as prerequisite, this yielded almost 40.000 companies. This number was drastically reduced when all the necessary variables were selected and the final sample of market based parties consisted of 236 companies. This reduction has an influence on my total sample. These companies represent only 0.5% of the entire population and this could influence the generalizability of this sample. After carefully examining the total population it became clear that almost the full sample consist of the so called Dutch BV's. The small BVs are not required to file a full balance sheet and profit & loss statement. This is the main and most important reason that a lot of companies are dropped from the entire population since there is no data available. If companies are not obligated to report their net income or any other number they will not do this since this is considered to be sensitive information. It appears, the answer to my research question does not apply to these (fiscal) entities.

### **5.3 Measurement of variables**

Earnings management cannot be observed directly and therefore I use a proxy to capture the two types of earnings management which are accrual-based earnings management and real-based earnings management. In the literature there are only two types of earnings management and therefore these types are used. The next two sections (5.3.1 and 5.3.2) elaborate on each of these proxies.

### 5.3.1 Proxy for accrual based earnings management

The use of accrual models, and more specifically the use of discretionary accruals, has been the focus of research in accounting to capture earnings management. Accruals are used in the accounting process to make sure revenues and expenses that are incurred are placed in the right fiscal year. This could be explained more by using an example. If you sell a product at the 25<sup>th</sup> of December 2012 and you receive the payments for this product in January 2013 the revenues from this product have to be put in the annual report of 2012 since you sell the product in 2012. You can use accruals to accomplish this. The accounting research distinguishes between discretionary and non-discretionary accruals (Dechow, Ge, & Schrand, 2010). These non-discretionary accruals refer to the choice of the accounting policy per se, for example whether the company uses LIFO or FIFO accounting for the inventory, or the policies for revenue recognition. The second category are discretionary accruals, these include warranty costs, inventory value, and extraordinary items such as write offs. The former examples all imply the use of judgment in order to come to the right financial number and this can be used to manipulate the earnings. The four proxies by Leuz, Nanda, & Wysocki (2003) are used to examine the level of accrual-based earnings management. These authors developed four different measures of earnings management. The reason this proxy is chosen is because the Orbis database provides sufficient data as where it was impossible to examine other proxies that capture earnings management and I use a slightly modified version of the Leuz et al. (2003) proxies. Not only data availability is important, it is also important that the Leuz et al. (2003) proxies are good representatives of earnings management. The use of this proxy is accepted and often used in the accounting literature (e.g., Burgstahler et al., 2006; Barth, Landsman, & Lang, 2008; Lang, Lins, & Maffett, 2012).

The first proxy (AEM1) captures the degree to which insiders smooth<sup>1</sup> the variability of reported earnings by using accruals. The proxy is a ratio of the firm-level of operating earnings (EBIT) divided by the firm-level of cash flow from operations (CFO). I will now explain this proxy in more detail.

While you read an annual report you have three important statements, which are the balance sheet, the statement of cash flows and the profit & loss account. The profit and loss account represents the “accounting number” which is earned in a fiscal year. Due to the existence of accruals this number is not the same as the actual money that goes in and out the company in one specific year. All the money that goes in and out of the company is represented by the statement of cash flows. The above proxy states that the more the “accounting number” differs from the cash that goes in and out of the company, there is a higher level of earnings management.

In the above proxy, scaling is applied to control for differences in variability of economic performance. High values of the found proxy indicate that, ceteris paribus, insiders use accruals to smooth reported earnings. EBIT is directly available from the Oribis Database where the CFO is not. Therefore CFO is measured by subtracting the accrual component of earnings. The formula for accruals is stated as equation (1).

$$Accruals_{it} = (\Delta CA_{it} - \Delta Cash_{it}) - (\Delta CL_{it} - \Delta STD_{it} - \Delta TP_{it}) - Dep_{it} \quad (1)$$

Where,

$\Delta CA_{it}$  = change in total current assets for firm  $i$  in year  $t$ .

$\Delta Cash_{it}$  = change in cash/cash equivalents

$\Delta CL_{it}$  = change in total current liabilities

$\Delta STD_{it}$  = change in short-term debt included in current liabilities

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<sup>1</sup> Income smoothing is seen as pattern of earnings management. There are two reasons for income smoothing. First, from a contracting perspective risk-averse managers prefer a constant bonus, this can be achieved by smoothing earnings. Another reason is related to the debt covenants. If there is a volatile stream of earnings there is higher probability of violating the covenants (Scott, 2008, pg., 405).

$\Delta TP_{it}$  = change in taxes payable

$Dep_{it}$  = depreciation and amortization expenses

If there is no data on the change in short-term debt in current liabilities, depreciation and changes in taxes payable this is assumed to be zero (Leuz et al., 2003).

The second proxy (AEM2) captures the use of accruals to conceal economic shocks<sup>2</sup> to the firm's CFO. Accounting accruals can be used as a buffer for cash flow shocks such as the delay or acceleration of revenues. Accounting accruals mitigate cash flow shocks. To examine this I use the change in accruals divided by the change in cash flows from operations (CFO). Equation 1 is used to compute this measure and high values of the found proxy indicate that, ceteris paribus, insiders use accruals to mitigate cash flow shocks.

The third proxy (AEM3) is the ratio of the absolute value of firm's accruals scaled by the absolute value of the firm's CFO. A higher value indicates, ceteris paribus, more earnings management. This proxy is based on the fact that insiders can use accruals to misstate economic performance. The third measure uses the magnitude of accruals as a proxy for the extent to which managers can exercise discretion in the reported earnings (Leuz et al., 2003).

The final proxy (AEM4) is based on the fact that managers do not want to report losses and want to meet the expectations of analysts<sup>3</sup>. Therefore, managers have incentives to avoid small losses. Small losses are likely to lie within the possibilities of accrual-based earnings management. The final proxy is the ratio of small profits to small losses for each set of firms. Small losses are in a range of [-0.01, 0.00] and small profits are in a range of [0.00, 0.01]<sup>4</sup>. I require at least five observations of small losses among the housing corporations and market based parties to be included in the sample. Less than five observations will lead to an unreliable proxy (Leuz et al., 2003). This prerequisite has

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<sup>2</sup> When economic shocks are limited this will result in more smoothing of earnings.

<sup>3</sup> This is related to the stakeholder and stock price motivation as discussed in section 5.2.

<sup>4</sup> This ratio is computed as follows: small profit (small loss) = net income (net loss) / lagged total assets. The 0.01 refers to a 1% range as within the small profit/ small loss should be.

implications for my sample and ensures that the sample is not biased by a few observations. If there are fewer observations this proxy is not be included in the final sample.

Following previous literature (e.g., Leuz et al., 2003; Burgstahler, Hail, & Leuz 2006; Cohen et al., 2008) I use an aggregate measure (AEMagr) of the above four proxies for earnings management to mitigate for potential measurement error. The aggregate measure is computed as the sum of the standardized<sup>5</sup> variables divided by the number of proxies. In other words, I add up the values of the four proxies and divide these by four to have a better approximation of the level of accrual-based earnings management.

### 5.3.2 Proxy for real-based earnings management

To measure real-based earnings management the proxy by Roychowdhury (2006) is used. This proxy measures the abnormal level of CFO<sup>6</sup>, production costs<sup>7</sup> and discretionary expenses<sup>8</sup> as a measure of real-based earnings management. Abnormal levels are calculated as the actual level minus the normal level. To measure the normal levels of CFO, discretionary expenses and production costs the model by Dechow, Kothari, & Watts (1998) is used<sup>9</sup>. There are three manipulation methods that affect the abnormal levels of the above variables such as the abnormal CFO, production costs and discretionary expenses (Cohen & Zarowin, 2010).

1. Improved sales through sales discounts and more lenient credit terms. Price discounts and more lenient credit terms temporarily improve sales volumes, but this is likely to vanish once the firm reverts back to the old prices. The additional sales boost the current earnings, if you assume the profit margin is still positive (Cohen & Zarowin, 2010). However, price discounts

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<sup>5</sup> Standardizing refers to the conversion of negative values into positive values.

<sup>6</sup> CFO refers to the cash flow of operations. This relates to the money/cash that goes in and out of the company for their normal operations. Operations refer to the normal business the companies conduct. In the case of housing corporations this is the amount of cash that is received for renting out their dwellings.

<sup>7</sup> Production costs refer to the costs that are necessary to conduct the operations of the company.

<sup>8</sup> Discretionary expenses relate to specific expenses such as maintenance, advertising, and selling, general and administrative expenses.

<sup>9</sup> See equation 2 until 6.

and more lenient credit terms lower cash flows in the current period than what is normal given the sales level (Roychowdhury, 2006).

2. A second method is overproduction or the increase of production to lower cost of goods sold (COGS)<sup>10</sup>. Managers can produce more than necessary in order to increase earnings. If production is higher, the fixed costs are spread over more units and thereby lowering the total cost per unit. The decrease in COGS can only be met when there is no increase in the marginal cost per unit. If total cost per unit diminishes, profits margins go up. (Cohen & Zarowin, 2010). However, there are also costs related to the increased production. Production and holding costs are incurred and are not recovered in the same period through sales. As a consequence, COGS are lower than normal given sales levels (Roychowdhury, 2006).
3. Finally, a reduction in discretionary expenses. Discretionary expenses are R&D, advertising and SG&A expenses. If these expenses are reduced this leads to improved earnings. This reduction can have positive cash flow effects if the firm pays for these expenses with cash (Cohen & Zarowin, 2010). SG&A is included since this variable can include certain discretionary expenses such as training and maintenance expenses (Roychowdhury, 2006).

To find the normal level of the above mentioned variables this paper uses the model developed by Dechow et al. (1998) and the subsequent study by Roychowdhury (2006). Normal CFO is a linear function of sales and change in sales. In equation (2) scaling is applied to control for differences in variability of economic performance.

$$\frac{CFO_{it}}{Assets_{i,t-1}} = k_1 \frac{1}{Assets_{i,t-1}} + k_2 \frac{SALES_{it}}{Assets_{i,t-1}} + k_3 \frac{\Delta SALES_{it}}{Assets_{i,t-1}} + \varepsilon_{it} \quad (2)$$

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<sup>10</sup> Cost of goods sold is not reported directly in the database there I use total revenue minus operating income (Burgstahler et al., 2006)

Where,

$CFO_{it}$  = cash flow from operation in year  $t$

$Assets_{i,t-1}$  = the total assets at the end of period  $t$

$SALES_{it}$  = the sales during period  $t$

$\Delta SALES_{it}$  =  $Sales_t - Sales_{t-1}$

Using equation (2) we find the normal level of CFO<sup>11</sup>. The first proxy (REM1) is the abnormal CFO. Abnormal CFO is actual CFO minus the normal level of CFO which is calculated using equation (2).

The second proxy (REM2) is the abnormal level of COGS. Abnormal COGS is actual COGS minus the normal level of COGS which is a linear function of contemporaneous sales and can be calculated using equation (3).

$$\frac{COGS_{it}}{Assets_{i,t-1}} = k_1 \frac{1}{Assets_{i,t-1}} + k_2 \frac{SALES_{it}}{Assets_{i,t-1}} + \varepsilon_{it} \quad (3)$$

Where,

$COGS_{it}$  = costs of goods sold in year  $t$

$Assets_{i,t-1}$  = the total assets at the end of period  $t$

$SALES_{it}$  = the sales during period  $t$

Following previous research (Burghstahler et al., 2006; Cohen et al., 2008) I use an aggregate measure (REMagr) of the above two proxies for real-based earnings management to mitigate for potential measurement error. The aggregate measure is computed as the sum of the standardized variables divided by the number of proxies. In other words, I add up the values of the two proxies and divide these by two to have a better approximation of the level of real-based earnings

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<sup>11</sup> Scaled by total assets

management. I use an equal weight for each proxy since there is no reason to assume that one of the two proxies should have a higher or lower weight. Furthermore, the literature does not go into this topic either.

### 5.3.3 Regression model and control variables

Section 5.3.1 and 5.3.2 contain several proxies and formulas which lead to two aggregate measure of earnings management (AEMagr and REMagr). These aggregate measures of earnings management are my dependent variables in the regression model. There are four independent variables as where the first one is a dummy variable. The housing associations are characterized as a 1 and the purely market based firms will be given a 0. Next to this dummy I also include three additional control variables based on Burgstahler et al. (2006). Control variables are measurable variables that are kept constant to avoid them influencing the effect of the independent variable on the dependent variable (Saunders et al., 2012, pg 668). The first control variable is the firm's size (SIZE). This is measured as the book value of total assets in €. I expect that housing corporations are bigger than market based parties since housing corporations were established a long time ago and there is an increased level of mergers. The second control variable is growth (GROWTH) and is measured as the annual percentage change in revenue<sup>12</sup>. A final control variable is profitability (PROF) and is measured as net income divided by lagged<sup>13</sup> total assets. Since the privileged position of the housing corporations leads to lower financing costs I expect that they will grow faster and will be more profitable than market based parties. All the control variables are examined on the mean level.

The above dependent variables and independent variables lead to my regression model. The regression model for accrual based earnings management looks as follows

$$\text{AEMagr} = \beta_0 + \beta_1 \text{HousingCorporation} + \beta_2 \text{SIZE} + \beta_3 \text{GROWTH} + \beta_4 \text{PROF} + \varepsilon_i$$

Where,

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<sup>12</sup> annual % change in revenue in 2011

<sup>13</sup> Lagged refers to  $t_{-1}$

$AEMagr$  = the level of accrual based earnings management

$\beta_0$  = the intercept

${}_1HousingCorporation$  = dummy variable where a one represent a housing corporation

${}_2SIZE$  = control variable related to SIZE

${}_3GROWTH$  = control variable related to GROWTH

${}_4GROWTH$  = control variable related to PROF

$\varepsilon_i$  = error term

The model for real based earnings management look as follows

$$REMagr = \beta_0 + \beta_1HousingCorporation + \beta_2SIZE + \beta_3GROWTH + \beta_4PROF + \varepsilon_i$$

Where,

$REMagr$  = the level of real based earnings management

$\beta_0$  = the intercept

${}_1HousingCorporation$  = dummy variable where a one represent a housing corporation

${}_2SIZE$  = control variable related to SIZE

${}_3GROWTH$  = control variable related to GROWTH

${}_4GROWTH$  = control variable related to PROF

$\varepsilon_i$  = error term

The next chapter describes the results of the statistical analysis of earnings management and the archival research of the housing corporations' annual reports.

## VI Results

This chapter contains descriptive statistics about the control variables, the level of accrual based earnings management, and real based earnings management by using a T-test. After the descriptive statistics, the regression model is examined and these results are presented in section 6.2. The final section contains the results of the archival study of the housing associations with the highest and lowest level of earnings management.

### 6.1 Descriptive statistics

Table 4 provides descriptive statistics for the different control variables. The table shows that two control variables are significant. It appears that housing corporations are larger than purely market based firms. The difference is almost a factor 2.5. This implies the housing corporations are a lot bigger than the purely market based firms, this observation is in line with my expectation. Consistent with section 5.3.3 I expect that housing corporations are bigger since they were established a long time ago and there is an increased level of mergers. Table 4 also shows that market based firms are able to grow a lot faster than housing corporations in 2011. They appear to grow at a factor nine in comparison to the housing corporations, this observation is not in line with my expectation. Consistent with section 5.3.3 I expect that housing corporations would grow faster since they have privileged position over the market based firms. A possible explanation of this outcome is that housing corporations are more conservative in expanding their activities. It could have been the case that the housing corporations were anticipating for the new rental tax (*verhuurdersheffing*) and therefore did not expand their activities. The table also shows there is no (statistically) difference in profitability of the housing corporations and market based firms, it appears there are no differences between the profitability of housing corporations and purely market based firms.

**Table 4: descriptive statistics of the control variables**

Type	N	SIZE*	GROWTH (2011) **	PROF <sub>it</sub> (2011)
Housing corporations	173	€298.865	4%	2%
Market based firms	230	€129.429	36%	-3%

SIZE: book value of total assets in 2011 , GROWTH<sub>it</sub>= annual % change in revenue in 2011, PROF = net income (2011) divided by lagged total assets. Source: Orbis Database

\*, \*\*, \*\*\* significant difference at 0.01, 0.05 and 0.1 levels respectively

Table 5 provides descriptive statistics for the type of firm, the four standardized proxies for accrual-based earnings management (AEM 1 till AEM4), and the aggregate measure of accrual-based earnings management (AEMagr). The table shows that AEM1, AEM2, and AEM3 are not statically different for housing corporations and market based parties and therefore it can be concluded that there are no differences in AEM1, AEM2, AEM3 between the housing corporations and the purely market based firms.. AEM4 shows that housing corporations engage less in earnings management than purely market based firms. Housing corporations show a lower amount of small profits than purely market based firm. Small profits are seen as way to apply accrual based earnings management. A small profit can be accomplished by the use of accruals. Table 5 also shows that housing corporations engage less in the aggregate measure of accrual based earnings management than purely market based firms. This tells us that when the four proxies are examined together this yields a significant difference between housing corporations and purely market based firms. It should be noted that this difference is only significant at 0.1 level where the difference in AEM4 is significant at a 0.01 level.

**Table 5: descriptive statistics of standardized accrual-based earnings management (AEM)**

Type	N	Earnings smoothing measures		Earnings discretion measures		Aggregate measure
		AEM1	AEM2	AEM3	AEM4*	AEMagr***
Housing corporations	173	0,50	1,12	0,73	1,34	0,92
Market based firms	230	0,77	1,39	2,45	1,83	1,61

Source: Orbis Database. \*, \*\*, \*\*\* significant difference at 0.01, 0.05 and 0.1 levels respectively

Table 6 provides descriptive statistics for each type of firm, the two proxies for real-based earnings management (REM1 and REM2), and the aggregate measure for real-based earnings management (REMagr). Table 6 shows that all the used proxies show a significant difference between the housing corporations and market based firms. REM1 shows that housing corporations engage less in earnings management than purely market based firms. It appears that the abnormal levels of CFO are lower for housing corporations than for purely market based firms. The difference is almost a factor 18. The absolute level of REM1 for the housing corporations is extremely low when compared to the market based parties. Table 6 also shows that housing corporations engage less in the proxy of REM2. This proxy is related to overproduction which could lead to improved results, it appears that the housing associations have less overproduction. The difference is in this case is a factor 5, and the absolute level of the housing corporations is again close to zero. The aggregate measure of real based earnings management is also statistically significant, which means that overall the housing corporations engage less in real based earnings management than purely market based firms.

**Table 6: descriptive statistics of standardized real-based earnings management (REM)**

Type	N	REM1*	REM2*	REMagr*
Housing corporations	173	0,07	0,03	0,05
Market based firms	230	1,22	0,16	0,69

Source: Orbis Database

\*, \*\*, \*\*\* significant difference at 0.01, 0.05 and 0.1 levels respectively

The next section contains my regression analysis and after that section the archival research of the annual reports is conducted.

## 6.2 Regression analysis

Section 6.1 provided descriptive statistics by using a T test and tests whether there is statistical difference between two variables. The first variable is a dummy variable consisting of a housing corporation and a market based firm. The second variable is the level of earnings management. If you use an OLS regression you are able to overcome the limitation of two variables and you can include multiple independent variables. In addition to the previous variables I include three control variables which are size, growth, and profitability. Before I can run an OLS regression it is important to check the assumptions that are made in the modeling process. The output used to test these assumptions can be found in Appendix A.

The first assumption underlying the regression model is that the dependent variable can be calculated as a linear function of the independent variables (Kennedy, 2008, pg 41). This can be tested by using a residual plot. When the assumption is met the residuals should be randomly plotted around the zero line. This is not the case for the aggregate accrual earnings management. The aggregate real earnings management proxy is rather consistent with linearity.

The second assumption is that the errors have the same variance (homoscedasticity) (Kennedy, 2008, pg 41). I use Levene's test to check for the assumption of homoscedasticity. This test shows that only AEM3 shows homogeneity as where the others do not, including the real based earnings management proxies.

Another assumption is that the errors should arise from a normal distribution and to check for a normal distribution, I use a histogram of the residuals (Landau & Everitt, 2004). Appendix A shows that the accrual based earnings management proxy is not consistent with the assumption of normality as where the aggregate measure of real based earnings management does show a normal distribution.

A final assumption that should not be violated is related to multicollinearity (Kennedy, 2008, pg 41). This can be identified by using the variance inflation factor (VIF) (Field, 2009, pg 224). As rule of thumb VIFs above 10 are seen as a concern (Weinberg & Abramowitz, 2002). Appendix A shows that the assumption of the multicollinearity is not violated since the found VIF values are below 10.

Strictly speaking I am not allowed to run a regression analysis since there is a violation of the assumptions, nevertheless I do run my regression and I will include this as a limitation in my research. Even though the assumptions are not met the regression analysis is still useful.

The regression analysis will be used to answer my research question. My research question is as follows: what is the role of the housing corporations in the Dutch housing market and can a case be made for its privileged position on the grounds of financial criteria? The last part of my research question is answered by using the level of earnings management as a financial criterion. This paper makes a distinction between accrual-based earnings management and real-based earnings management. The regression analysis will be run for both types of earnings management.

The first regression is run with the AEMagr as the dependent variable. This variable is an aggregation of the four accrual based earnings management proxies. The first independent variable is a dummy variable which distinguishes between a housing corporations and a market based firm. The control variables included in this model are size, growth and profitability. Table 7 contains the output of the regression analysis. The output of this model is not significant and therefore it can be concluded there are no differences in the level of accrual based earnings management between the housing corporations and purely market based firms. In table 7, I use the aggregate measure of accrual based earnings management. This aggregate measure consists of four proxies. As a sensitivity check I also run this regression with each of the four proxies and examine whether my results change. The sensitivity analysis is consistent with the model as presented in table 7, except for the AEM4 proxy. This proxy shows a significant relation at a 0.01<sup>14</sup> level and therefore it can be concluded that housing

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<sup>14</sup> More information regarding the N, R<sup>2</sup>, and the coefficient can be found in Appendix B.

corporations show a lower amount of small profits than market based parties. This could be interpreted as evidence that housing corporations engage less in accrual based earnings management. Small profits could be achieved through the use of accrual based earnings management and therefore this is seen as earnings management.

**Table 7: statistics for accrual earnings management as dependent variable with HousingCorporation, SIZE, GROWTH, and PROF as independent variables**

<b>AEMagr = <math>\beta_0 + \beta_1\text{HousingCorporation} + \beta_2\text{SIZE} + \beta_3\text{GROWTH} + \beta_4\text{PROF} + \epsilon_i</math></b>		
<b>Variables</b>	<b><math>\beta</math></b>	<b>T-value</b>
Constant	1,63	5,10*
HousingCorporation	-0,70	-1,46
SIZE	-3,98E-010	-0,08
GROWTH	-0,39	-0,30
PROF	0,09	0.15
N= 403		
R <sup>2</sup> = .006		

\*, \*\*, \*\*\* significant difference at 0.01, 0.05 and 0.1 levels respectively

Source: Orbis database

The second regression is run with the REMagr as the dependent variable. This variable is an aggregation of the two real based earnings management proxies. The first independent variable is a dummy variable which distinguishes between a housing corporations and a market based firm. The control variables included in this model are size, growth and profitability. Table 8 contains the output of the regression analysis. The output of this model is significant and it can be concluded that housing corporations engage less in real based earnings management than purely market based firms. In table 8 I use the aggregate measure of accrual based earnings management. This aggregate measure consists of two proxies. As a sensitivity check I also run this regression with AEM1 and AEMX2 and examine whether my results change. The sensitivity analysis is consistent with the model

as presented in table 8. When run individually, REM1<sup>15</sup> and REM2<sup>16</sup> show a negative significant relation and this is evidence that housing corporations engage less in real based earnings management. It appears the housing corporations show a lower level of abnormal CFO (measured with REM1) than purely market based firms, this is evidence that the housing corporations apply less real-based earnings management. The housing corporations also have a lower level of abnormal COGS (measured by REM2), which is also evidence of real based earnings management.

**Table 8: statistics for real earnings management as dependent variable with HousingCorporation, SIZE, GROWTH, and PROF as independent variables**

<b>REMagr = β<sub>0</sub> + β<sub>1</sub>HousingCorporation + β<sub>2</sub>SIZE+ β<sub>3</sub>GROWTH + β<sub>4</sub>PROF + ε<sub>i</sub></b>		
<b>Variables</b>	<b>β</b>	<b>T-value</b>
Constant	0,66	10,14*
HousingCorporation	-0,56	-5,70*
SIZE	-1,67E	-1,55
GROWTH	0,11	3,96*
PROF	-.39	-3.04*
N= 403		
R <sup>2</sup> = .15		

**\*, \*\*, \*\*\* significant difference at 0.01, 0.05 and 0.1 levels respectively**

**Source: Orbis database**

Based on the regression analysis it can be concluded that housing corporations show a lower amount of small profits than market based parties and this is evidence that housing corporations engage less in accrual based earning management. Table 8 shows that housing corporations engage less in real based earnings management than purely market based firms. The next section will contain my qualitative research of the housing corporations’ annual report.

<sup>15</sup> More information regarding the N, R<sup>2</sup>, and the coefficient can be found in Appendix B.  
<sup>16</sup> More information regarding the N, R<sup>2</sup>, and the coefficient can be found in Appendix B.

### 6.3 Archival research

Section 6.3 contains my sub analysis and in this sub analyses I want to go more in depth about the level of earnings management *within* the housing corporation sector. Section 6.2, which covered my statistical analysis, concluded that housing corporations apply less earnings management than purely market based firms. In this section I want to examine whether there are differences in this group of housing corporations by doing archival research. In chapter two it became clear that housing corporations are hybrid entities between the state, market and the third sector. In the literature, the housing corporations are characterized by several third sector elements such as a distinctive social mission, the involvement of members and the use of volunteers (see also table 3 on page 31). Since the housing corporations have a social mission you expect them to act in line with this social mission. I want to examine whether this social mission, the involvement of members and the use of volunteers actually has an impact on the level of earnings management of the housing corporations. I select five housing corporations with the highest level of earnings management and I select five housing corporations with the lowest level of earnings management. After this selection, the 2011 annual report of each housing corporation is analyzed and I check whether these corporations actually have a distinctive social mission, actually involve members and make use of volunteers.

The five housing corporations with the lowest level of earnings management are: Patrimonium Woonstichting, Stichting Prowonen, Stichting de Woonschakel West-Friesland, Woonstichting Kessel, and Woningcorporatie de Woningbouw. The five housing corporations with the highest level of earnings management are Woonstichting Meerssen, Stichting Mooiland, Woonstichting Rentree, Stichting Sprengenland Wonen, R.K woningstichting Ons Huis.

The 2011 annual report of each housing corporation is analyzed and I check whether these corporations are characterized by a social mission, the use of volunteers and involvement of their members. The next section contains the analysis of each of the annual reports for these companies. I start the analysis with the housing corporations with the lowest levels of earnings management.

### 6.3.1 Housing corporations with a low level of earnings management

The first housing corporation that is examined is Patronium Woonstichting, hereafter Patronium. The introduction of the annual report written by the general director already hints to the social mission of Patronium. The director states that Patronium is driven by their Christian roots and they want to help the weak to find appropriate housing or in Dutch: *“Gedreven vanuit onze christelijke identiteit maken we ons sterk voor de zwakkeren, om in hun woonbehoefte voorzien”* (Patronium, 2011, pg 3). This is emphasized again later in the annual report: the core business of a corporation is to provide housing for people who cannot provide it for themselves or in Dutch: *De kerntaak van een corporatie blijft overeind om een passende woning aan te bieden voor die mensen die niet in staat zijn in hun eigen woningbehoefte blijvend te kunnen voorzien* (Patronium, 2011, pg 6).

The involvement of the renters is also important for Patronium. They believe that when rentees are involved they will feel responsible for their home and their environment. The board of Patronium gets together with the rentees four times a year or in Dutch: *“een andere zaak waar de raad positief tegenover staat, is de wijze waarin de betrokkenheid van bewoners is vormgegeven in de relatie huurder/verhuurder [...] Immers, een betrokken bewoner voelt zich ook verantwoordelijk voor zijn of haar leef- en woonomgeving”* (Patronium, 2011 pg 10). Patronium also make use volunteers and more specifically they use volunteers in a project in the city center of Groningen (Patronium, 2011,pg 37). To conclude, it appears Patronium has a social mission, involves their members and makes use of volunteers.

The second housing corporation that is examined is Stichting Prowonen, hereafter Prowonen. Prowonen also emphasize that they are a social corporation and they build and manage dwellings for people who can't rent or buy a dwelling in the free market. Their customers are mostly with a low income however Prowonen also tries to provide housing for people with a slightly higher income. Since they are also not able to find proper housing by themselves or in Dutch: *“ We zijn een sociaal volkshuisvester met een maatschappelijke opdracht: we bouwen en exploiteren woningen voor*

*mensen die om persoonlijke redenen zelf geen woning kunnen huren of kopen op de particuliere markt. De kern van onze klanten bestaat uit mensen met een inkomen tot € 33.614 (prijspeil 2011). Dit is onze primaire doelgroep en onze grootste klantengroep. Ook mensen met een hoger inkomen tot anderhalf keer modaal (€ 48.750,- prijspeil 2011) willen wij helpen bij huisvesting. Want voor veel mensen uit deze doelgroep is een koopwoning op de vrije markt onbereikbaar” (Stichting ProWonen, 2011, pg 10). The rentees are important to Prowonen and they understand that Prowone should listen and actively involve the rentees or in Dutch: “Onze klanten zijn belangrijk voor ons: ze zijn de reden van ons bestaan. We luisteren goed naar de wensen en behoeften van onze klanten en betrekken hen actief bij de ontwikkeling van nieuwe producten, diensten en beleid” (Stichting Prowonen, 2011, pg 12). Prowonen also facilitates the use of volunteers, they provide common areas in elderly homes where volunteers are able to help the elderly (Stichting Prowonen, 2011, pg 42). To conclude, eventhough Prowonen provides housing for low and middle income families they do this with a specific (social mission) in mind. They are also actively involved with their renters and facilitate volunteers.*

The third housing corporation is called Stichting de Woonschakel West-Friesland, hereafter called Woonschakel. The first page of the annual report already emphasizes the social role and the involvement of members. The Woonstakel provides special attention for customers who are not able to get proper housing by themselves. The corporation aims to have an active cooperation with their employees and their customers or in Dutch: “*de Woonschakel is actief herkenbaar in de samenleving van West-Friesland en biedt een gevarieerd woonmilieu aan een breed publiek. Bijzondere aandacht wordt geschonken aan klanten die door hun maatschappelijke positie en/of inkomen hierin moeilijk kunnen voorzien. Als kernprofiel wil De Woonschakel solide en betrouwbaar zijn voor klant en zakelijke relaties. Door een actief beleid is zij herkenbaar in de lokale samenleving en wordt zij maatschappelijk gewaardeerd. De organisatie is professioneel en kritisch, werkt met gemotiveerde medewerkers en tekent zich door een open communicatie met klant en maatschappij. Er wordt*

*gestreefd naar duurzame relaties met belanghebbenden, het aangaan van de dialoog met de samenleving en een organisatie die openheid en transparantie hoog in het vaandel heeft staan”* (Stichting de Woonschakel West-Friesland, 2011, pg 3). The Woonschakel also facilitates and supervises volunteers, as of 2011 the Woonschakel provides 28 positions for social interns (maatschappelijke stage) (Stichting de Stichting de Woonschakel West-Friesland, 2011, pg 46). It appears the theoretical third sector elements of the housing corporations are actually embraced by de Woonschakel.

Woonstichting Kessel is the fourth housing corporation that is examined in this qualitative research. The previous housing corporations explicitly made clear they provide housing for people who are not able to themselves. The annual report of Kessel does not explicitly make statement about a social mission but it can be found in a different part of the annual report . The social mission is implicitly stated in their annual report. In the introduction they state that Wessel is proud about a concept called ‘Housing First’ in which housing is offered to homeless people or in Dutch: *Trots zijn we op het project dat wij met ‘Housing First’ hebben kunnen realiseren, waarbij huisvesting geboden wordt aan een kwetsbare doelgroep binnen onze samenleving”* (Woonstichting Wessel, 2011 pg 3). The implicit social mission can also be found the number of social dwellings Wessel rents out, almost 99% of their dwellings is a social dwelling (Woonstichting Wessel, 2011 pg 19). Wessel is really explicit in the involvement of their members, they even spend an entire chapter on the involvement, and the name of the chapter is: *“het betrekken van bewoners bij beleid and beheer”* (Woonstichting Wessel, 2011 pg 21). The annual report does not mention any involvement of volunteers. Overall it can be concluded there is an implicit social mission and the involvement of members is important to Wessel.

The final housing corporation that is examined which has one of the lowest scores of the housing corporation is called Woningcorporatie de Woningbouw. The Woningbouw classifies itself as a company of the general interest and that they have to provide housing for low income classes. In between the lines you can read that they actually want to provide housing for a larger group of

people otherwise you will not a good mixture of different income groups. This can be found in the following lines: *“De Woningbouw is de belangrijkste aanbieder van sociale huurwoningen en heeft daarmee een grote verantwoordelijkheid voor Weesp zich demografisch ontwikkeld, de beeldkwaliteit van de bebouwing en indirect de lokale economie [...] Deze ontwikkeling vinden wij ongewenst omdat het evenwicht ontbreekt. Te veel van hetzelfde is niet goed, voor geen enkele betrokken partij”* (Woningcorporatie de Woningbouw, 2011, pg 6). The Woningbouw stresses the importance of dialog with their members in their strategy statement: *“In onze visie is opgenomen dat wij ons primair bezig houden met wonen. Wij kiezen er bewust voor om dat samen met onze omgeving te doen”* (Woningcorporatie de Woningbouw, 2011, pg 5). The Woningbouw also devotes a full chapter to the involvement of their members (Woningcorporatie, 2011, pg 19). Woningbouw does not mention the use of volunteers in their annual report of 2011. In conclusion, Woningbouw does provide social housing for people who are not able to themselves but they do not always agree this is the best thing to do as it could lead to segregation. Woningbouw also stresses the importance of member involvement and do not mention anything about the use of volunteers.

It appears that the five housing corporations with a low level of earnings management that are examined all have implicit or explicit social missions, where one housing corporation questions whether this is the way to do it. De Woningbouw actually wants to provide housing for the low income and middle income families. The five housing corporations also underline the importance of the involvement of members, some of the housing corporations mention it briefly where others provide an entire chapter to the involvement of their members. The use of volunteers is less apparent within these housing corporations, only three corporations mention the use of them. The next section will provide the same analysis for the housing corporations with the five highest levels of earnings management.

### 6.3.2 Housing corporations with a high level of earnings management

The first housing corporation with a high level of earnings that is examined is Woonstichting Meerssen, hereafter Meerssen. The preface of the annual report already hints to the social mission of Meerssen and this is confirmed on page 4. Meerssen is a social entrepreneur active in providing housing and our most important task is to offer affordable housing for everyone and especially for the less fortunate or in Dutch: *“Wonen Meerssen is een sociaal maatschappelijke ondernemer, werkzaam in de volkshuisvesting. Onze belangrijkste taak is het bieden van betaalbare huisvesting voor iedereen, in het bijzonder diegenen die door een beperkt inkomen of andere omstandigheden moeilijk voor eigen huisvesting kunnen zorgen”* ( Woonstichting Meerssen, 2011, pg 5). Meerssen also recognizes the importance of their clients. In 2011 they often discussed with the rental associations and tenants commissions (Woonstichting Meerssen, 2011, pg 2). Meerssen does not use volunteers themselves but they do sponsor an organization which works with volunteers (Woonstichting Meerssen, 2011, pg 18). It appears there is a social mission and an active involvement of the tenants.

Stichting Mooiland is het second housing corporation with a high level of earnings management that is examined. Mooiland also recognizes their social mission and they want to provide a home instead of a house. They spent special attention to people who can use a little extra seen from a financial perspective (Mooiland, 2011, pg 8). The mission statement leads to three pillars, which are work to provide housing, together with tenants and a challenging partner. The second pillar is the most interesting to this analysis. In 2011, Mooiland actively involves their members with the development of Mooiland’s policy and they facilitate and emphasize the own responsibility of the tentants. The annual report does not mention the use of volunteers in any way (Mooiland, 2011, pg 5). So Mooiland has a distinctive social mission and also involves their members.

One of the first pages of Rentree's annual report already confirms their social mission, the core business of Rentree is provide suitable and affordable housing with people who have a vulnerable position on the property market or in Dutch: *"De kerntaak van Rentree is het bieden van passende en betaalbare huisvesting aan mensen met een kwetsbare positie op de woningmarkt, zoals mensen met een bescheiden inkomen"* (Rentree, 2011, pg 10). Rentree also actively involves their members with the use of a tenant's commission named Sluiswijk (Rentree, 2011, pg 6). In comparison to the above two housing corporations Rentree does facilitate the use volunteers. Rentree operates as an intermediary and guides the tenants to other (voluntary) organizations which can help the tenants with their problems (Rentree, 2011, pg 22). To conclude, Rentree has a social mission, they facilitate the use of volunteers and do involve their members.

The fourth housing corporation that is examined is Stichting Sprengeland Wonen. The first aspect that is being emphasized is the cooperation with different parties such as municipalities, other corporations and the tenants. Sprengeland wants to inform their stakeholders with as much information as possible, they want to be a transparent company or in Dutch: *Sprengeland Wonen wil belanghouders informeren over en betrekken bij het doen en laten van de corporatie, zowel vooraf als achteraf. Sprengeland Wonen en de RvC vanuit haar eigen rol en positie, willen een transparante schakel zijn in een open systeem dat werkt aan zo goed mogelijk voorzien in woonbehoeften in brede zin"* (Sprengeland Wonen, 2011, pg 9). The social mission is not as clearly stated in their annual report as in the annual reports of other corporations. The core activity of Sprengeland is to provide housing or in Dutch: *"de kernactiviteit van Sprengeland Wonen is uiteraard het beheren en verhuren van woningen. Middels nieuwbouw, sloop/vervangende nieuwbouw en aan- en verkopen wordt bijgedragen aan vernieuwing van het bezit en het aanbod afgestemd op (toekomstige) wensen en behoeften. Daarnaast bezit Sprengeland Wonen ook ander vastgoed"* (Sprengeland Wonen, 2011, pg 11). While reading this it is not immediately clear that they provide social housing. However, while reading further through the annual report it becomes clear that the level of rent is below the

maximum level. This could mean that Sprengenland does provide social housing, but this is not as clear as in other annual reports. Sprengenland makes use of volunteers to provide assistance when there is conflict in the neighborhood (Sprengenland Wonen, 2011, pg 25). Sprengeland actively involves their tenants and make use of the volunteers. However it is not completely clear they actually have a distinctive social mission.

The final housing corporation that is examined is R.K woningstichting Ons Huis. The corporation sees itself as a company with an important social task or in Dutch: *“wat ons betreft, heeft Ons Huis als corporatie nog steeds een belangrijke maatschappelijke taak. Wij blijven ons dan ook onveranderd inzetten voor goede en betaalbare huisvesting voor onze huurders en voor een bijdrage aan de stad”* (Woningstichting Ons Huis, 2011, pg, 7). Ons Huis also involves their members with the use of a tenants committee. This committee is used to communicate between Ons Huis and their tenants and it covers subjects which directly relate to the living situation of the tenants (Woningstichting Ons Huis, 2011, pg 33). Ons Huis also facilitates and supervises volunteers. Ons Huis provides 8 positions for social interns (*maatschappelijke stage*) (Woningstichting Ons Huis, 2011,pg 40)

It appears that the five housing corporations with high levels of earnings management that are examined four of them have distinctive social mission as where Sprengenland Wonen does not directly have this social mission. Nevertheless, all the five housing corporations underline the importance of the members and actively involve them. The use of volunteers is limited, only in three cases volunteers are used. Based on this qualitative research of the annual reports there are no large differences to be found in the third sector elements of the housing corporations with the lowest level of earnings management and the housing corporations with the highest level of earnings management.

## VII Conclusion

Housing corporations in the Netherlands play an important role in the Dutch housing market. They accompany almost a third of the entire Dutch population (VROM, 2010) and the media continues to spend a lot of attention to the housing corporations. In the literature housing corporations are characterized as hybrid entities since they do not fall into one specific sphere of the public, private or third sector (e.g., Billis, 2010b; Brandsen, 2006a). There are two approaches to hybridity in the literature. The first approach classifies an organization as hybrid when they mix the elements of a public and private organization (e.g., Emmert, & Crow, 1988). The second approach understands hybrid organizations as organizations between the public, private, and third sector (e.g., Billis, 2010a). The main difference between these two approaches is the presence of the third sector. In this thesis I build upon the second approach since this approach is more specific (it includes a third sector), and there is more towards an organization than just a mixture of the public and private sphere. The third sector elements are an important and distinctive sphere, these specific elements can be found back in table 2.

The most important third sector elements of the housing corporations are a distinctive social mission, the use of volunteers and member involvement. These elements enable the housing corporations to benefit from four distinct privileges provided by the Dutch Government. These include state guarantees for the loans from the WSW, support from the CFV, the sale of public land by municipalities at a price below market value and the right to borrow from the Dutch Municipality Bank. Since the housing corporations have this social mission you expect them to act in line with this social mission and behave accordingly. This means that it is expected that they act ethically, so they behave in a way which is consistent with good values and principles. You expect the housing corporations to fairly present their financial statements and in accordance with the law and accounting rules. Nevertheless, in the introduction it became clear that there was abusive behavior at one specific housing association. Vestia did not use their derivatives in line with the law and this

was a violation of the law and accounting rules (Verbraeken, & Piersma, 2013). Vestia tried to portray a rosy picture of their performance by using the limitations of the accounting rules. This is also called earnings management.

This leads to my research question which is: what is the role of the housing corporations in the Dutch housing market and can a case be made for the privileged position based on the grounds of a financial criterion. The financial criterion that is used is the level of earnings management. The answer to the first part of the research question is that the primary role of the housing corporations is to give priority to people for whom it is hard to find proper housing or do not have sufficient income to find affordable housing (Intraval, 2012). Next to this, there is an increased application of businesslike principles and increased commercial activities (e.g., Boelhouwer, 1999; Brandsen, Farnell, & Ribeiro, 2006b). To answer the question whether the privileged role of the housing corporations is justified I use a quantitative and a qualitative method.

The quantitative method that is used is an OLS regression analysis. By using regression analysis with multiple independent variables I answer my research question by testing the likelihood of earnings management. In this analysis I compare the level of earnings management of the housing corporations with the purely market based firms. This way I try to give an answer to the research question by examining whether the housing corporations have less earnings management than purely market based firms and therefore their privileged role could be justified. My quantitative analysis differentiated between the levels of accrual based earnings management and real based earnings management. The OLS regression of the accrual based earnings management did not yield any significant results and therefore it can be concluded there are no differences in the level of accrual based earnings management among housing corporations and purely market based firms. The second OLS analysis which examined the level of real based earnings management did yield a significant result. This means that the regression shows that housing corporations engage less in real based earnings management than purely market based firms. To conclude, the privileged position of

the housing corporations over the purely market based firms is justified based on the level of real based earnings management. It appears that the current institutional framework is justified based on my quantitative analysis. The housing corporations are seen as a mixture of the state, market and the third sector and compared to purely market based firms they engage less real based earnings management. So the state aid that is received through the four privileges is justified based on the quantitative analysis.

In this thesis I also conduct a sub analysis by using a qualitative research method, more specifically I conduct archival research. I use the 2011 annual report of the housing corporations as my source of data. In this sub analysis I went more in depth about the level of earnings management *within* the housing corporation sector. In this analysis I do not make a comparison between the housing corporations and the purely market based firms, but I look at differences *within* the housing corporation section. The housing corporations balance between the market, state and the third sector. The third sector elements of the housing corporations are a distinctive social mission, the involvement of members and the use of volunteers. In my sub analysis I examined whether housing corporations with the lowest level of earnings management are actually characterized by a distinctive social mission, the involvement of members, and the use of volunteers and whether housing corporations with the highest level of earnings management are less well represented by these third sector characteristics. I started to search for the mission statement and when this was not available I looked for the vision or strategy of the housing corporation. When none of these aspects are available I continued to read through the annual report and look for statements that are linked to a distinctive social mission. To find out about the involvement of their members I search for the presence of (tenants) committees and read through the annual report to detect any other signs of member involvement. As for the use of volunteers, I search the annual report for the word volunteer.

In my sub analysis I found that corporations with the lowest level of earnings management all had a social mission and the five housing corporations also underline the importance of member

involvement. The use of volunteers is less apparent within these housing corporations, only three corporations mention the use of volunteers. Next to the five corporations with the lowest level of earnings management I also examined five housing corporations with the highest level of earnings management. Four of these corporations have a distinctive social mission. Nevertheless, these housing corporations all stress the importance of the involvement of their members. The use of volunteers is also limited, only three out of five housing corporations state the use of volunteers. This analysis implies that these housing corporations more or less all have a distinctive social mission, involve their members and in a limited way make use of the volunteers. Based on this qualitative research of the annual reports there are no large differences to be found in the third sector elements of the housing corporations with the lowest level of earnings management and the housing corporations with the highest level of earnings management.

The paper makes contributions to the scientific literature and practice. First of all, my thesis confirms the current institutional framework and based on my analysis no changes have to be made in the institutional environment. A second contribution is that I am the first author to provide insights in the level of earnings management among housing corporations. Finally, I give a conceptual approach to hybridity based on Billis (2010a; 2010b) and I place the Dutch housing corporations in this model, as where Billis (2010a; 2010b) is primarily focusing on the English sector.

An important contribution to practice is that based on my analysis the privileged position of the housing corporations is justified. It appears that the money from the government is used well. A second contribution to practice is that I provide additional empirical evidence of possible fraudulent behavior. Intraval (2010) specifically asked to conduct more research in the Netherlands.

This paper is subject to limitations. First of all, this paper only analyzes one specific financial criterion which is the level of accrual-based and real-based earnings management. Secondly, there was only limited data availability since the CFV did not grant me access to their database due to the fact that I am student. I emailed the CFV and asked them whether I was able to use their database, as a

response they told me that they do not give out their database to (Master) students. The third limitation is related to my statistics. In my analysis I only use four independent variables where more could be added for a more complete model which explains the level of earnings managements, as a consequence the  $R^2$  is only .15. A fourth limitation concerns the assumptions underlying the regression model, not all the assumptions were met for my model. A fifth limitation relates to the use of my proxy. The proxy for real based earnings management contains three proxies where I only use two. The reason for this is that I do not have data for the third proxy. The final and maybe most important limitation relates to the sample I use in this thesis, in the case of the housing corporations my sample represents almost 45% of the entire population which is quite high. I used my control variables to examine whether there are differences for the entire population and the sample. I found that the entire population has higher growth, the same profitability and on average the housing corporations of the population are bigger. So it appears that the bigger and high growing housing corporations are not that well represented in my sample. The generalizability of the sample of the market based firms could be questioned since only a small percentage is represented from the entire population. But after carefully examining the total population it became clear that almost the full sample consist of the so called (Dutch) BV's. The small BVs are not required to file a full balance sheet and profit & loss statement. This is the main and most important reason that a lot of companies are dropped from the entire population since there is no data available. A lot of these BV's are set up for fiscal reasons and for a good comparison of the market based firms and housing corporations it helps to eliminate these small (fiscal) entities. It appears, the answer to my research question cannot be applied to the biggest and highest growing housing corporations and next to this the small (fiscal) entities are also removed from the sample and therefore the conclusions of this research also do not apply to these (fiscal) entities.

There are also some suggestions for future research. First of all, my research question could also be interpreted more broadly into: is het privileged position of the housing corporations justified? There are multiple aspects that can be examined to answer this question. In my thesis I looked at the level

of earnings management but future research could also look at profitability, efficiency, liquidity or solvency. CFV (2005) and Indepen (2008) have examined whether large organizations perform any better than smaller ones. They have done this by sophisticated analyses with the use of multiple financial criteria (van Bortel et al., 2010). Indepen (2008) used one specific method to examine the profitability and efficiency and they make use of the operating cost index (Indepen, 2008). The use of these financial criteria could be supplemented to my analysis and this could improve the  $R^2$  of my model. Another suggestion for future research is to expand my database which could lead to improved results. I, as a student was not able to use the database of the CFV, as where others might be able to get access. Another possibility is to manually enter the available data of the housing corporations from the annual reports which are publically available to improve the database. A possible recommendation for practice is to investigate why I found such a high level of earnings management among some housing corporations such as at Stichting Sprengenland Wonen and Rentree.

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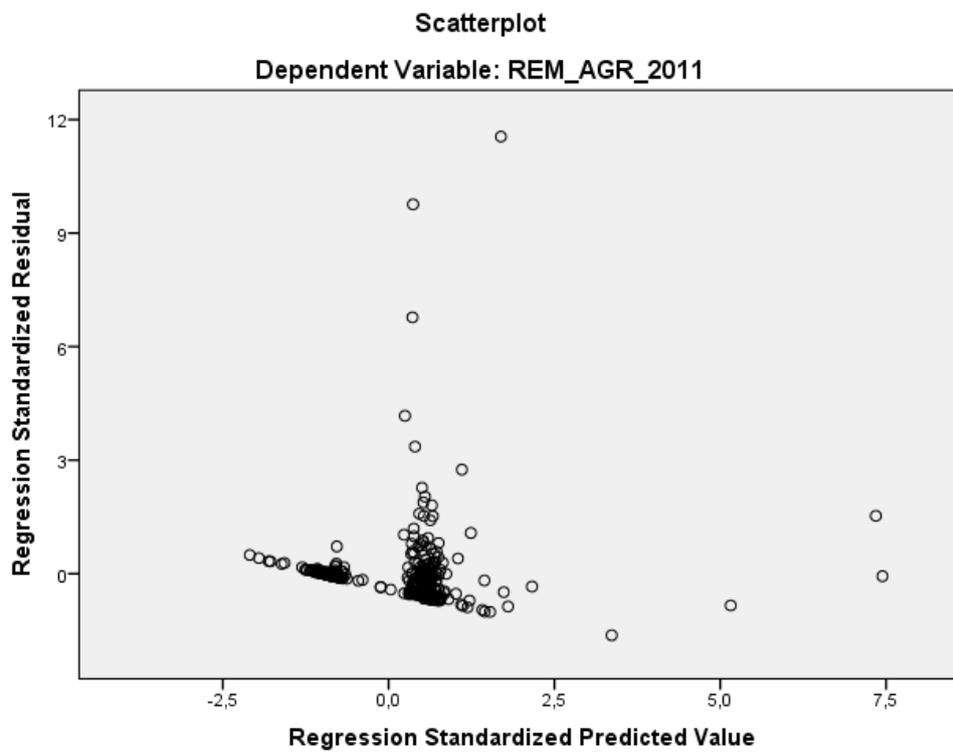
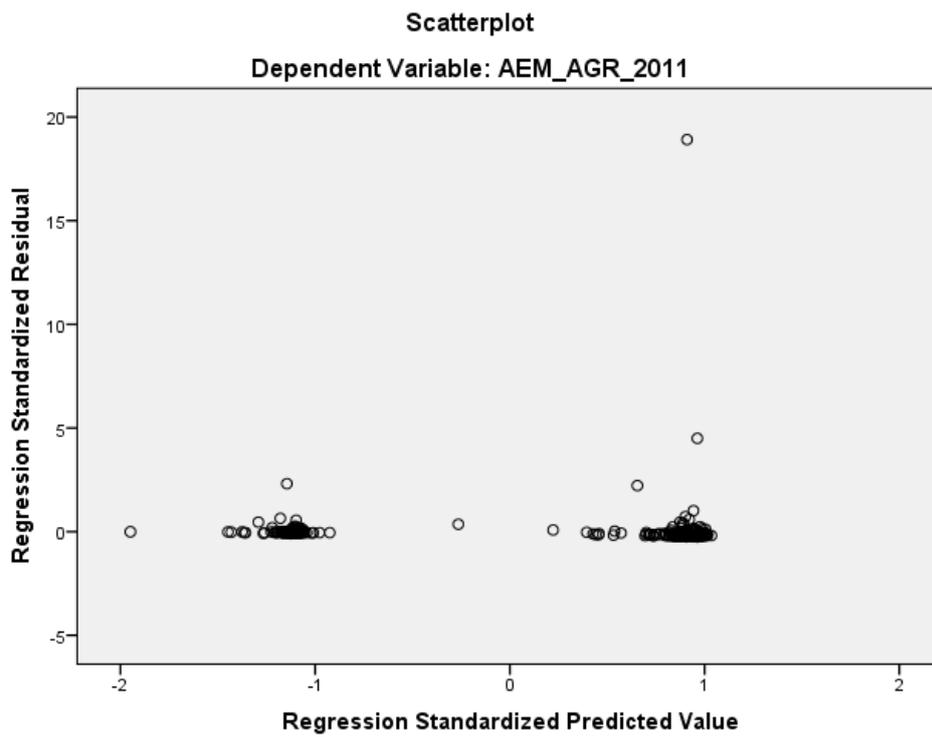
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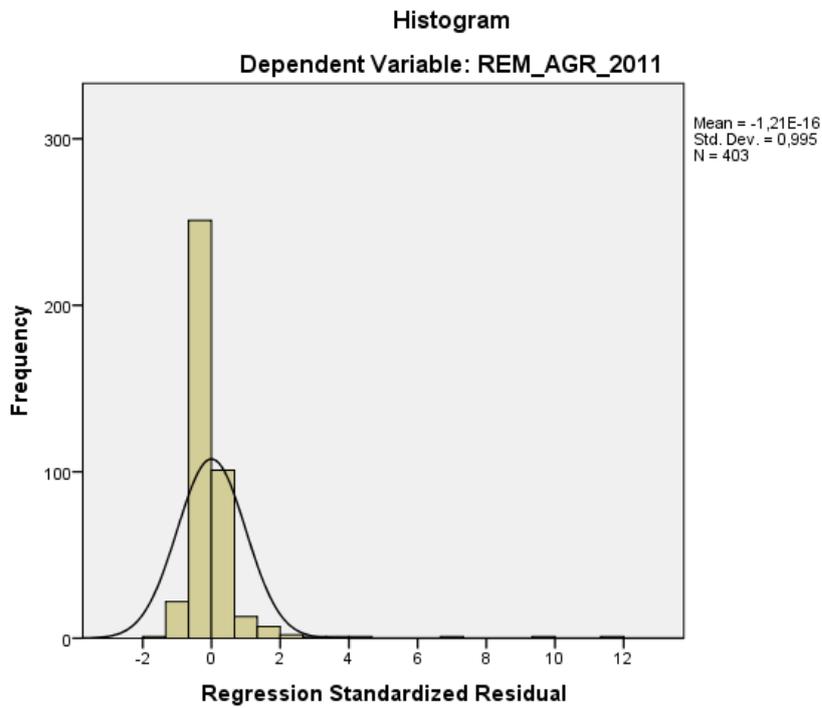
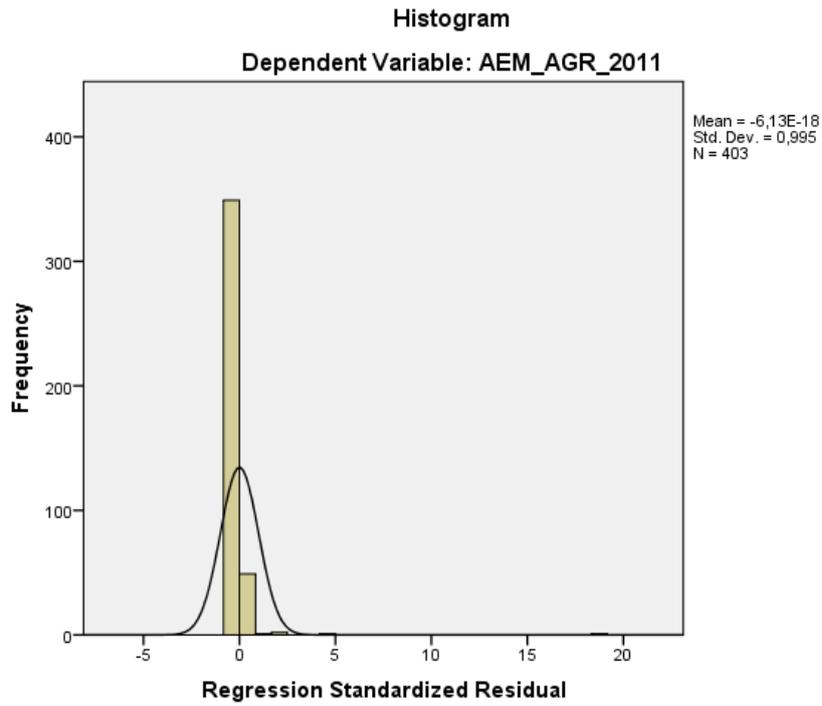
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## Appendix A





**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	1,633	,320		5,103	,000		
HAisONE	-,701	,481	-,075	-1,457	,146	,955	1,047
SIZE	-3,985E-008	,000	-,004	-,075	,940	,964	1,037
GROWTH	-,039	,131	-,015	-,297	,767	,984	1,016
PROF	,093	,628	,007	,148	,882	,989	1,011

a. Dependent Variable: AEM\_AGR\_2011

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	,661	,065		10,139	,000		
HAisONE	-,559	,098	-,270	-5,700	,000	,955	1,047
SIZE	-1,674E-007	,000	-,073	-1,551	,122	,964	1,037
GROWTH	,106	,027	,185	3,965	,000	,984	1,016
PROF	-,388	,128	-,141	-3,035	,003	,989	1,011

a. Dependent Variable: REM\_AGR\_2011

## Appendix B

Statistics for AEM 4 as dependent variable with HousingCorporation, SIZE, GROWTH, and PROF as independent variables

<b>AEM4 = <math>\beta_0 + \beta_1\text{HousingCorporation} + \beta_2\text{SIZE} + \beta_3\text{GROWTH} + \beta_4\text{PROF} + \varepsilon_i</math></b>		
<b>Variables</b>	<b><math>\beta</math></b>	<b>T-value</b>
Constant	1,83	1071*
HousingCorporation	-0,50	-193
SIZE	-3,78E-010	-0,13
GROWTH	-2.849E-005	0,04
PROF	0,00	0.05
N= 403		
R <sup>2</sup> = .99		

\*, \*\*, \*\*\* significant difference at 0.01, 0.05 and 0.1 levels respectively

Source: Orbis database

Statistics for REM1 as dependent variable with HousingCorporation, SIZE, GROWTH, and PROF as independent variables

<b>REM1 = <math>\beta_0 + \beta_1\text{HousingCorporation} + \beta_2\text{SIZE} + \beta_3\text{GROWTH} + \beta_4\text{PROF} + \varepsilon_i</math></b>		
<b>Variables</b>	<b><math>\beta</math></b>	<b>T-value</b>
Constant	1,19	9,48*
HousingCorporation	-1,027	-5,43*
SIZE	-3,18E-007	-1,53
GROWTH	0,16	3,15**
PROF	-0,31	-1,24
N= 403		
R <sup>2</sup> = .34		

\*, \*\*, \*\*\* significant difference at 0.01, 0.05 and 0.1 levels respectively

Source: Orbis database

Statistics for REM2 as dependent variable with HousingCorporation, SIZE, GROWTH, and PROF as independent variables

<b>REM2 = <math>\beta_0 + \beta_1</math>HousingCorporation + <math>\beta_2</math>SIZE+ <math>\beta_3</math>GROWTH + <math>\beta_4</math>PROF + <math>\epsilon_i</math></b>		
<b>Variables</b>	<b><math>\beta</math></b>	<b>T-value</b>
Constant	0,13	7,55*
HousingCorporation	-0,90	-3,491*
SIZE	-1,63E-008	-0,58
GROWTH	0,049	7,03*
PROF	-0,47	-14,05*
N= 403		
R <sup>2</sup> = .627		

\*, \*\*, \*\*\* significant difference at 0.01, 0.05 and 0.1 levels respectively

Source: Orbis database