Municipal corporations: A study of the accounting choice

Authors
Olle Schultz
Dennis Tran

Supervisor
Daniela Argento

Examiner
Pernilla Broberg
Abstract

Accounting choice has prior to this dissertation been studied comprehensively in the private sector, and in a small extent in the public sector.

The purpose of this study is to explain what factors influence the accounting choice in municipal corporations. The dependent variable, accounting choice, has been limited to explain if the municipal corporations either use the fair-value method or the cost-depreciation method when considering asset value loss. The independent variables are partly derived from the New Public Management, which is an umbrella term for the decentralisation of public state authority.

The findings of the study indicate that the factors municipal corporations’ dual role does not influence the accounting choice. However, a correlation between the turnover and the use of the fair-value method has been found. The study also shows that there is a correlation between the regulations of the Municipal Act and the use of fair-value method. Furthermore, only one of the hypotheses was found significant. This stated that there is a positive correlation between the financing from the private sector and the use of cost-depreciation method to value tangible assets. The findings indicate that one cannot study municipal corporations as a single phenomenon (i.e. no municipal corporations is another alike). This is because they incorporate characteristics from both the public and the private sector, and thus, have different levels of publicness.

The limitation of this study is that the dependent variable accounting choice is only considering the asset value loss (i.e. fair-value and cost-depreciation method), and thus, does not give a holistic picture of the research field.

Keywords: dual role, hybrid, New Public Management, government, accounting choice, fair-value method, cost-depreciation method, municipal corporations.
Acknowledgement

First of all, we would like to thank our supervisor Daniela Argento for her tremendous work and patience. In addition, we would like to thank Timurs Umans for pushing us in the right direction.

Secondly, we thank Annika Fjelkner for all the help with grammar and linguistics. Also we would like to thank Pierre Carbonnier for sharing his expertise in statistics.

Thirdly, we thank all the municipal corporations that answered our survey, which made this study possible. We could not have done this study without you. We hope that the results will come in handy for your operations.

On a more personal note, we would like to thank our families that have supported us during this dissertation.

June 2014

__________________________  __________________________
Olle Schultz                Dennis Tran
# Table of contents

1. Introduction ................................................................................................................................. 9
   1.1 Background .............................................................................................................................. 9
   1.2 Problematization ..................................................................................................................... 11
   1.3 Research question .................................................................................................................. 13
   1.4 Purpose .................................................................................................................................... 13
   1.5 Limitations .............................................................................................................................. 13
   1.6 Outline .................................................................................................................................... 14

2. Method .......................................................................................................................................... 15
   2.1 Research philosophy, fundamental approach and structure ................................................... 15
   2.2 Empirical methodology .......................................................................................................... 16
   2.3 Choice of theoretical framework ........................................................................................... 17
   2.4 Method summary .................................................................................................................... 18

3. Theoretical framework and hypotheses ....................................................................................... 19
   3.1 Accounting choice .................................................................................................................. 19
      3.1.1 Asset value loss ............................................................................................................... 21
         3.1.1.1 Fair-value method ...................................................................................................... 21
         3.1.1.2 Cost-depreciation ...................................................................................................... 22
   3.2 Dual role of municipal corporations ...................................................................................... 23
      3.2.1 The role as a welfare function ......................................................................................... 23
      3.2.2 The role as a business-like function ............................................................................... 24
      3.2.3 New Public Management (NPM) in municipal corporations .......................................... 25
   3.3 Hypotheses ............................................................................................................................. 27
      3.3.1 External factors ................................................................................................................. 28
         3.3.1.1 Legal framework ......................................................................................................... 28
         3.3.1.2 Market competition .................................................................................................... 30
         3.3.1.3 Political interference ................................................................................................. 31
3.3.1.4 Level of monitoring ................................................................. 32

3.3.2 Internal factors ............................................................................ 34
3.3.2.1 Organizational structure ......................................................... 34
3.3.2.2 Goals ....................................................................................... 35
3.3.2.3 Financing ................................................................................ 36
3.3.2.4 Ownership ............................................................................. 38
3.3.2.5 Organizational control ............................................................ 40

3.4 Theoretical model building ............................................................. 42

4. Empirical method ............................................................................ 43

4.1 Literary search and review ............................................................. 43
4.2 Population ...................................................................................... 44
4.3. Data collection method ................................................................. 45
4.4 Operationalization of the survey ..................................................... 45

4.4.1 The dependent variable ............................................................. 45
4.4.2 Independent variable ................................................................. 47
4.4.2.1 Legal framework ................................................................. 47
4.4.2.2 Market competition .............................................................. 48
4.4.2.3 Political interference ............................................................ 49
4.4.2.4 Level of monitoring .............................................................. 49
4.4.2.5 Organizational structure ....................................................... 49
4.4.2.6 Goals ..................................................................................... 50
4.4.2.7 Financing .............................................................................. 51
4.4.2.8 Ownership ........................................................................... 51
4.4.2.9 Organizational control .......................................................... 52

4.4.3. Control variables ..................................................................... 54
4.4.3.1 Respondent organizational position ...................................... 55
4.4.3.2 Financial outcome ............................................................... 55
4.4.3.3 Number of employees ........................................................... 56
### 4.4.3.4 Geographical location

56

### 4.5 Pilot study

56

### 4.6 Data analysis

57

### 4.7 Reliability

57

### 4.8 Validity

58

### 4.9 Generalizability

58

### 4.10 Ethical considerations

59

### 5. Analysis

59

#### 5.1 Descriptive statistics

59

##### 5.1.1 Respondents

60

##### 5.1.2 Control variables

61

- 5.1.2.1 Organizational position
- 5.1.2.2 Financial outcome
- 5.1.2.3 Number of employees
- 5.1.2.4 Geographical location

##### 5.1.3 Dependent variables

63

##### 5.1.4 Independent variables

64

- 5.1.4.1 External variables
- 5.1.3.2 Internal variables

##### 5.1.5 Hypotheses Testing

73

- 5.1.5.1 External variables
- 5.1.5.2 Internal variables
- 5.1.5.3 Summary of the hypotheses testing

##### 5.1.6 Regression analysis

77

- 5.1.6.1 Dependent variable
- 5.1.6.2 Independent variables
- 5.1.6.3 Control variables
- 5.1.6.4 Regression analysis of the variables
List of figures

Figure 1. Factors of the dual role in municipal corporations ............................................. 27
Figure 2. Factors of the dual role in municipal corporations influence on accounting choice ......................................................... 42
List of tables

Table 1. Characteristics of the fair-value and the cost-depreciation methods .................. 23
Table 2. Hypotheses ........................................................................................................ 41
Table 3. External factors and questions ......................................................................... 54
Table 4. Internal factors and questions ........................................................................ 54
Table 5. Respondents ................................................................................................... 60
Table 6. Gender .............................................................................................................. 61
Table 7. Organizational position .................................................................................. 61
Table 8. Financial outcome .......................................................................................... 62
Table 9. Number of employees .................................................................................... 62
Table 10. Geographical location .................................................................................. 63
Table 11. Asset value loss ............................................................................................. 63
Table 12. Question towards the Municipal Act .............................................................. 64
Table 13. Question towards the Swedish Companies Act ............................................. 65
Table 14. Question towards market competition ............................................................ 66
Table 15. Question towards political interference .......................................................... 66
Table 16. Question towards level of monitoring .............................................................. 67
Table 17. Question towards the organizational structure .............................................. 68
Table 18. Question towards profitability ....................................................................... 68
Table 19. Question towards the welfare systems of the society ..................................... 69
Table 20. Question towards the financing from the private sector .................................. 69
Table 21. Question towards the financing from the public sector ................................... 70
Table 22. Question towards the ownership be the public sector ..................................... 71
Table 23. Question towards the ownership be the public sector ..................................... 71
Table 24. Question towards the organizational control .................................................. 72
Table 25. Summary of the independent variables ........................................................... 73
Table 26. Summary of the hypotheses testing ................................................................. 77
Table 27. Recoding into a dummy variable ................................................................... 78
Table 28. Omnibus Tests of Model Coefficients ............................................................ 80
1. Introduction

This chapter aims to introduce the reader to the topic and gives a basic understanding of the research problem. This chapter includes the following sections: background, problematization, research question and purpose as well as limitations and outline of the dissertation.

1.1 Background

Municipalities are governmental entities with the primary focus directed to the welfare of the society (Bergmann, 2009). The municipalities should act as a welfare function in order to comply with the societal demands and expectations considering elementary needs and requirements (Holmberg, 2010). Nevertheless, because of many criticism, the performance improvements in public services are recognised as a goal for many governments, and have resulted in a variety of public governance reform initiatives (Peda, 2012). Over the last decades, reforms were implemented in order to decentralize levels of governments, through the devolution of power and responsibilities from central to local governments, and also through various forms of privatizations (e.g. municipal corporations) (Fox, 1996).

According to prior research (e.g. Owens & Zimmerman, 2013; Reichard, 2006; Argento, Grossi, Tagesson, & Collin, 2010) the reforms implemented in order to decentralize levels of the governments leads to an erosion of traditional state authority. The erosion of traditional state authority refers to the decentralization of governments through various forms of privatizations (Reichard, 2006). Argento, Grossi, Tagesson, & Collin (2010) argue that an important consequence of these institutional changes (i.e. decentralization of the government) has been the transformation of local governance systems including also the need for increased cooperation between public and private actors. According to Owens and Zimmerman (2013) the institutional changes within governmental organizational practise has led to hazier boundaries between the public and private sectors.

In line with the transformations depicted above, municipalities have gradually reconstructed their practices into more indirect organizational forms through decentralization of public service provision (Reichard, 2006; Sörensen, 2007; Wettenhall, 2001). The decentralizations were launched with the aim to obtain greater levels of effectiveness, efficiency and economy in the public sector (London, 2002). Although, it has led to complexities regarding both
organizational structures and practices (Argento et al., 2010). These complexities refer to that public services are provided by semi-autonomous corporations (e.g. municipal corporations) which enjoy various degrees of managerial freedom from the municipality (Argento et al., 2010).

This has led to a continuous debate about profits within the welfare of the society. Municipalities are a part of the welfare systems in the society hence municipally owned corporations should reproduce the same function (Meyer, Månsson & Nilsson, 2013). Thus, the debate is about municipally owned corporations with the aim of profit creation, furthermore the municipal corporation’s compliance to public regulation and societal norms (Baermann & Bloeser, 2006). In Sweden, the centre of the debate has been focused on the ownership of municipal corporations (Thomasson, 2009). The debate has been frequent in media but questions have also been raised in the Swedish parliament (Interpellation 2007/08:692) (Sveriges Riksdag, 2008).

The decentralization of governments leads to municipally owned corporations that act on business-like terms but at the same time are constrained by the governments to administer welfare programs (Collin et al., 2009). According to Baermann and Bloeser (2006) it is "saying goodbye to the welfare queen" and "saying hello the poverty pimp" (ibid, p. 4). This quote symbolizes the governance’s function before and after the decentralization through various forms of privatizations. The welfare queen refers to the centralized government and the poverty pimp to the decentralization of government decision power into various privatizations (e.g. municipal corporations). However, one has to have in mind that in some cases, the municipal corporation are not fully owned by the municipality; they might be for instance a public-private-partnership (Argento et al., 2010).

According to Holmberg (2010) municipal corporations face a dual role in society, whereas the actions of the municipal corporations are directed towards the welfare of the society, but at the same time have to be executed in business like business-like terms. However, there is no specific definition or explanation of the characteristics within municipal corporations due their dual role in society, within the prior research (Andon, 2012). Andon (2012) stresses a need to further research the nature and functioning of municipal corporations and consider the complexities of these in action. This dual role explained by Holmberg (2010) lead to municipal corporations obtaining characteristics from both the private and the public sector. Thus, this dual role in society should presumably influence the accounting choice of
municipal corporations (Collin et al., 2009). Furthermore, municipal corporations must have separate accounting systems from the municipality and must account for the management of their resources (ibid).

This dissertation will derive characteristics and factors of municipal corporations, due to their dual role in society from prior research and examine their influence on the accounting choice. According to Broadbent and Guthrie (2007) the research within the field of accounting choice in municipally owned corporations is limited compared to the field of private corporations. Nevertheless, Andon (2012) argues that the trend of research directed to accounting choice in municipally owned corporations is escalating (e.g. Collin et al., 2009; Carpenter & Feroz, 2001; Elbannan and McKinley, 2006; Martani & Lestiani, 2012). This might be explained by media focus towards municipal corporations and the welfare systems as well as enhanced monitoring from the society in general (Baermann & Bloeser, 2006).

This dual role of municipally owned corporations evokes our interest for the subject and the field of study. Moreover, how this dual role influences the operations within the corporations, hence the accounting choice. Therefore, in consideration to the discussion above, research based on the accounting choice in Swedish municipal corporations should be of interest.

1.2 Problematization

According to Holmberg (2010) the hazier boundaries between the public and private sectors leads to a dual role for the municipal corporations. Furthermore, this dual role is connected to the hybridity in governance explained by Lindqvist (2013) and the institutional twilight area explained by Collin et al. (2009). This dual role addresses that hybrid organizations (i.e. municipal corporations) are corporations which are created in order to address public needs and to produce services that are public in character (Holmberg, 2010). Nevertheless, at the same time municipal corporations resemble private corporations in the way they are organised and managed (Thomasson, 2009). Peda (2012) explains how the dual role refers to institutional pressures from different stakeholders, to represent the society’s interest (given that they are publicly owned), as well as acting on business-like terms.

The decentralization of governments into various forms of privatizations (e.g. municipal corporations) is connected to the implementation of management techniques typically used in the private sector within the waves of New Public Management (NPM) (Bergmann, 2009). Governments implemented NPM in order to obtain better efficiency and profitability (Hood,
Prior research has identified some factors that influence municipal corporations’ operations, such as; regulations, external pressures and ownership structures (e.g. Hood, 1995; Thomasson, 2009; Collin et al., 2009; Carpenter & Feroz, 2001; Elbannan and McKinley, 2006). Although, there is still a lack of coherent empirical studies that examine what factors influence the accounting choice in municipal corporations (Andon, 2012).

According to Collin et al. (2009) accounting can be perceived as having two functions: producing information for decision makers and distributing the results of production. Both functions have wealth effects for stakeholders of the organization. Furthermore, Bushman and Smith (2001) argue that accounting produces information to the shareholders, which facilitates evaluation of projects and the control of the management. Furthermore, according to Quagli and Avallone (2010) accounting also influence the wealth of organizations, since it for instance can influence accruals and determine the amount of dividends available.

Research and literature have long recognized the variables influencing the accounting choice in private corporations, while there are areas of neglect in the public sector (Andon, 2012). Fields, Lys and Vincent (2001) describe accounting choice as 'any decision whose primary purpose is to influence [...] the output of the accounting system in particular way' (p. 256). In the studies concerning private sector, the accounting choices have commonly been derived from the assumption of the positive accounting theory, which says that managers act in self-interest and opportunistically. Therefore, private corporations may choose accounting methods that best serves the manager’s interest (Zimmerman, 1977).

The public sector is different in comparison to the private sector, there are more stakeholders to attend to and publicly owned corporations have to be accountable for their operations (Peda, 2012). In addition, Carpenter and Feroz (2001) argue that institutional pressures influence the accounting choice of municipal corporations. Therefore the accounting choices within the private and the public sector may differ, due to different interests (Collin et al., 2009). Francis, Laford, Olsson and Schipper (2004) argue that different accounting choices may influence the accounting numbers in very different ways. Furthermore, Collin et al. (2009) found that to investigate the accounting choice in municipal corporations, one has to use an eclectic approach in order to make sound prediction of a phenomenon. This is because municipally owned corporations incorporate characteristics from both the private and the public sector.
Considering that municipal corporations face a dual role in society and the limited research existing towards the accounting choice in municipal corporations (Andon, 2012; Broadbent and Guthrie, 2007), research directed towards examining what factors due to the dual role in society influence the accounting choice in Swedish municipally owned corporations should be of interest.

1.3 Research question
What factors of the dual role in municipal corporations influence the accounting choice?

1.4 Purpose
The aim of the study is to examine what factors of municipal corporations’ dual role influence the accounting choice.

1.5 Limitations
A limitation of this research is that only a quantitative study is made, due to a restricted time limit. A triangulation combining a qualitative and quantitative study could have generated a deeper understanding of the management and function of municipal corporations and their effect on accounting choices. In addition, only one specific accounting choice is examined, the asset value loss. This is because the time limit of this dissertation.
1.6. Outline

1. Introduction

This chapter aims to introduce the reader to the topic and give a basic understanding to the problematization. This chapter includes the following sections: background, problematization, research question and purpose as well as limitations and outline of the dissertation.

2. Method

In this section the research philosophy, fundamental approach and structure are presented, followed by research methodology and adopted theory. The section ends with a summary.

3. Theoretical framework and hypotheses

In this chapter a theoretical framework is presented. The chapter includes the sections of accounting choice, asset value loss, dual role of municipal corporations, New Public Management (NPM) in municipal corporations, hypotheses and theoretical model building.

4. Empirical method

In this chapter is the empirical method of the dissertations presented. First the research strategy and the literary search are displayed, secondly the population is presented and the data collection method explained. This is followed by the operationalization of the survey. Hereafter comes the pilot-study. The section ends with the presentation of how data analysis will be performed, the reliability and validity of the study and ethical considerations.

5. Analysis

In this section the outcomes of the survey are presented. First, the descriptive statistics of the respondents, and the dependent, independent and control variables are presented. Secondly, the hypothesis will be tested, followed by logistic regression and correlation.

6. Conclusion

The conclusion chapter is the final part of the dissertation. The chapter include a summary of the dissertation together with reflections of the findings. This is followed by the contributions to the field and suggestions to future studies. This section ends with concluding comments.
2. Method

In this section the research philosophy, fundamental approach and structure are presented, followed by research methodology and adopted theory. The section ends with a summary.

2.1 Research philosophy, fundamental approach and structure

This dissertation adopts a positivistic approach. Patel and Davidson (2012) explain how a positivistic approach is characterized by knowledge building through general causal relations. In addition, Wisdom (1945) illustrate how a positivistic approach only can be adopted when there already are consisting knowledge within the field of study, when there is a possibility to rely on a theoretical framework. The ambition of the study is to explain what factors influence the accounting choice in municipal corporations. The aim of this dissertation is aligned with the positivistic approach using a theoretical framework in order to generalize and create new knowledge. If the study would have adopted a hermeneutic approach the result would not have been possible to generalize. Instead, hermeneutic approach consider all specific studies unique with separate phenomenon not generalizable (Saunders, Lewis & Thornhill, 2009)

The theoretical framework that is used to predict and explain the causal effect is derived from general theories and research. Thus, the study follows a deductive way of reasoning, which Patel and Davidson (2012) describe as a way of reasoning that follows a path of evidence. Through the use of general theories a deductive reasoning leads to conclusions about separate phenomena (ibid). The theoretical framework is used as a base in order to derive hypotheses that later are empirically tested. Using a deductive reasoning enables generalizing conclusions, through the use of empirical testing (Saunders et al., 2009), which is aligned with the overlying aim of the study.

Patel and Davidson (2011) describe how a deductive reasoning enhances objectivity of the research, since the hypotheses are derived through a general theoretical framework. Furthermore, the use of a deductive reasoning leads to conclusions with minimum impact of personal opinions. However, there might be possibilities that the researchers' personal opinions influence the result through a subjective choice of theoretical framework (Bryman & Bell, 2011). The deductive reasoning may influence the research in a specific way, in a direction presenting the researcher's angle and aspect on the field. In addition, a deductive reasoning can lead to a narrow research that does not include the whole field and all aspects
that might explain the hypotheses (Patel & Davidsson, 2011). With knowledge of the negative aspects of a deductive reasoning in consideration, the research will deliberately act to have a minimum effect on the result, being as objective as possible. This is reasonable given the time limit under which the dissertation is developed.

2.2 Empirical methodology
All scientific research has two separate fundamental methodologies to base the empirical study upon (Bjurwill, 2011). The first one is called a qualitative methodology and is based on a narrow section of the population in order to develop exhaustive understanding in the specific field of study (Bryman & Bell, 2011). The second one is called a quantitative methodology and is based on a large-scaled population in order to develop comprehensive and generalizable understanding (ibid).

The aim of the study is to examine what factors of municipal corporations dual role that influence the accounting choice. The research question demands comprehensive understanding in order to examine and identify what factors that influence the accounting choice in municipal corporations. According to Creswell (2014) it is of interest to the researchers to adopt a general framework providing guidance about all facts of the study. This general framework may conduct for instance; general philosophical ideas as well as previous research within the field of study. Accounting choice has in a historical perspective been researched with quantitative research methods (e.g. Collin et al., 2009; Carpenter & Feroz, 2001). Based on previous articles using a quantitative research method as well as Bryman and Bells (2011) description of the methodologies, this dissertation will adopt a quantitative research method in order to generalize and explain causal effects.

To make conclusions in collected empirical data, one must ensure that the data is generalizable (Denscombe, 2009). According to Denscombe (2009) empirical studies become generalizable through comparisons in a wider context, for example in comparisons over time (longitudinal research) or in a simultaneous comparison over different cases (cross-sectional research). The aim of the study is to examine what factors of the dual role in municipal corporations influence the accounting choice. Therefore, a cross-sectional research will be conducted in order to make the empirical data comparable over specific corporative borders, and in turn, generalizable.
2.3 Choice of theoretical framework

There are many theories that can be adopted to examine accounting choices; hence there are no universally agreed theoretical framework and perspective. According to Bryman and Bell (2011) the prior research should be reviewed in order to apply a comprehensive theoretical framework. As mentioned before, the research within the field of accounting choice in municipally owned corporations is limited compared to the field of private corporations (Collin et al., 2009). Nevertheless, there are research existing which explains the accounting choice in municipal corporations. The majority of the present research is based on the influence of societal institutional pressure (e.g. Carpenter and Feroz, 2001; Granlund and Lukka, 1998; Puxty, 1997). The influence of institutional pressure is derived from institutional theory and furthermore isomorphism (DiMaggio & Powell, 1983).

As mentioned before, municipalities tend to gradually reconstruct their activities into more indirect organizational forms through decentralizations, leading to hazier boundaries between the public and private sectors (Owens & Zimmerman, 2013). The hazier boundaries demand a more comprehensive theoretical framework (cf. Carpenter & Feroz, 2001; Puxty, 1997; Granlund & Lukka, 1998), including the influence of business-like terms as well as the influence of institutional pressures (Collin et al., 2009).

To obtain a more comprehensive theoretical framework and consider the hazier boundaries between the public and private sector, it is of interest to explore the literature and research within the field accounting choice in the private sector as well. The majority of the research within the accounting choice in the private sectors is based on the opportunistic behaviour perspective (e.g. Zimmerman, 1977; Watts, 1977; Baiman & Verrecchia, 1996; Holthausen, 1990, Bushman and Smith, 2001; Elbannan and McKinley, 2006). The research on accounting choices in the private sector acknowledged that accounting rules provide room to make choices and to adopt personal judgement (Fields et al., 2001). Consequently, accounting choices often require individual decisions in order to disclose financial statements, which might lead to inconsistency and incomparability (ibid). Holthausen (1990) adds that these inconsistency and incomparability lead to accounting decisions based on opportunistic behaviour. That is, managers making accounting choices with incentives to choose accounting methods in self-interest, which is one of the underlying assumptions of positive accounting theory (ibid).
Researchers have traditionally investigated the topic by using either institutional pressure-related theories, or through theories explaining opportunistic behaviour (cf. Carpenter & Feroz, 2001; Zimmerman, 1977; Elbanna and McKinley, 2006). However, other researchers, for instance Collin et al. (2009), suggest that the use of one theory might not be sufficient to explain how municipal corporations make decisions, leading to the need for a more combined use of theories. In order to make a theoretical framework that emphasize the hazier boundaries between the public and private sector; positive accounting theory, institutional theory and stakeholder theory are chosen as the theoretical framework in this dissertation.

2.4 Method summary
The aim of the study is to examine what factors of municipal corporations dual role that influence the accounting choice. Therefore this study is based on a fundamental positivistic philosophy and has a deductive approach. Furthermore, an empirical quantitative method with a cross-sectional design was chosen. The theoretical framework is in general based on stakeholder theory, institutional theory and positive accounting theory.
3. Theoretical framework and hypotheses

In this chapter a theoretical framework is presented. The theoretical framework includes elements of stakeholder theory, institutional theory and positive accounting theory. The chapter includes the sections of: Accounting choice, dual role of municipal corporations, hypotheses and theoretical model building. The section hypotheses include hypotheses related to each factor representing the dual role of municipal corporations.

3.1 Accounting choice

The section accounting choice is introduced with a definition of accounting choice. In addition, motivations to accounting choices are presented. According to Quagli and Avallone (2010) there are three major motivations to accounting choices: agency costs, information asymmetry, and managerial opportunism. Furthermore, this section explains how different accounting choices may influence the motivations depicted above.

Fields, Lys and Vincent (2001) define accounting choice as 'any decision whose primary purpose is to influence [...] the output of the accounting system in particular way' (p. 256). Thus, according to Quagli and Avallone (2010) accounting choice is a wide concept. Therefore, one has to focus on a specific accounting choice in order to make the study feasible. A workable accounting choice to operationalize is the asset value loss (ibid). Thus, there are two major directions in the accounting choice of asset value loss, either the cost-depreciation method or the fair-value method (Drefeldt & Törning, 2013). In addition, Quagli and Avallone (2010) present that the choice between fair value and cost is a central topic in the current debate on accounting. Therefore, asset value loss will be the factor for accounting choice in this dissertation.

According to Quagli and Avallone (2010) the three major motivations for corporations to make accounting choices are: agency costs, information asymmetry, and managerial opportunism. Fields et al. (2001) argue that corporations may choice specific accounting choices to influence the motivations depicted above.

According to Fields et al. (2001) an accounting choice may be motivated by reducing the agency costs by better aligning the incentives of the parties. Watts and Zimmerman (1990) explains how agency costs, which is the first of the three motivators, occurs when there is an agency relationship between the owner (the principal) and the decision-making organ (the
agent). The accounting is directed towards aligning the behaviour of the agent with the interests of the principal \((\text{ibid})\).

According to Fields \textit{et al.} (2001) accounting may reduce the problems that arise when markets do not perfectly aggregate individually held information. Moreover, accounting provides information to the market about the risks and future cash-flows. Thus, accounting choice may be motivated to reduce the \textit{information asymmetry}, which is the second motivator. In addition, Fields \textit{et al.} (2001) argue that accounting choices may influence other parties than actual and potential owners of the firm. External parties can be such as; the society, competitors or suppliers. According to Carpenter and Feroz (2001) corporations operate within a social framework of norms and expectations. Thus, they are being influenced by institutional pressures \((\text{ibid})\). Carpenter and Feroz (2001) conclude that strategic response to resist isomorphic pressure will ultimately fail due to the potency of the pressure.

Scott (1987) argues that organizations tend to act in accordance with the institutional pressures. Dillard, Rigsby and Goodman (2004) conclude how corporations tend to use the accounting practices as rationalizations in order to maintain legitimacy, which can be explained as:

\begin{quote}
"Legitimacy exists when an entity's value system is congruent with the value system of the larger social system of which the entity is a part" (Lindblom, 1993, p. 2).
\end{quote}

Oliver (1997) argues in the same direction as Scott (1987) by claiming that the societal framework is the foundation in which the organizations take part.

The third motivator is the \textit{managerial opportunism}. Fields \textit{et al.} (2001) argue that the accounting choice also may be made in self-interest of the managers, which is explained by the positive accounting theory. PAT is based on the central-economics-based assumption that the actions of all individuals are driven by self-interests (Watts and Zimmerman, 1990). Watts & Zimmerman (1990) present how PAT predicts that all economic consequences of the accounting choice explain the motivation behind the choice. Fields \textit{et al.} (2001) argue that manager’s belief that higher earnings will result in higher stock prices and in turn contributing to their compensation or reputation. However, Collin \textit{et al.} (2009) argue that the managers in Swedish municipal corporations usually do not have a compensation linked to profit. Therefore, this motivator will not be included in this dissertation.
3.1.1 Asset value loss

There are two main options when valuating assets: the fair-value method or the cost-depreciation method (Drefeldt & Törning, 2013). According to Francis et al. (2004) the tangible asset valuation methods of fair value and cost-depreciation influence the accounting in different ways. In the following subsections the influences of the fair-value and the cost-depreciation methods are explained through the two motivations (agency cost and information asymmetry) for corporations to make accounting choices.

3.1.1.1 Fair-value method

The fair-value method is a non-continuous method in order to value tangible assets (SABO, 2014). The fair value can shift dramatically due to, for instance, infrastructural changes or the overall economic situation (ibid). Therefore, corporations must declare in notes within the annual report the general assumptions and significant methods that has been used in order to derive the fair value (Quagli and Avallone, 2010). In addition, the corporations must use the same assumptions and significant methods in all cases, hence it makes an easier transition to the fair value method at a later stage (ibid). Thus, the fair-value method is considered volatile and non-continuous. Quagli and Avallone (2009) argue that the fair value method tend to increase the agency costs, as the volatility of the method makes it harder for shareholders and investors to predict future cash flows and organizational risks. Thus, Watts (2003) present that the more volatility the higher is the perceived risk by investors. As explained in the first chapter, in some cases there is a mixed ownership (i.e. public-private partnership) in the municipal corporation. This means that they can be partly owned by the municipality and partly owned from a private partner.

Fair value is directed towards present values and future cash flows (Holthausen, 1990). Thus according to Barlev and Haddad (2003) the fair-value method reduces the information asymmetry, since it produce updated and truthful information to the users. Moreover, according to Francis et al. (2004) the information perceived from the fair-value method will be more useful for the users of the financial statement. This in because the fair-value method accounts the actual, relevant and reliable value of the assets (Quagli and Avallone, 2010). Thus, the trend in the private sector is to adopt the fair-value method, hence the information refers to the actual image of the corporation (Quagli and Avallone, 2010). In addition, the global harmonization is directed towards the international standard of IFRS. The international
standard of IFRS are promoting the fair-value method, since it is considered to enhance the comparability of accounting data (Barlev & Haddad, 2007).

3.1.1.2 Cost-depreciation
The cost-depreciation method is a continuous method in order to value tangible assets (SABO, 2014). Although, there are different options available to corporations in order to respond to the asset value loss. Jackson, Rodgers and Tuttle (2010) explain that corporations can adopt three main depreciation accelerations, straight-line depreciation, accelerated depreciation or a decreasing depreciation. The straight-line depreciation is the most common method for real estate corporations (SABO, 2014). However, there are other options as mentioned above.

The choice of depreciation accelerations shall symbolize the actual organizational practise and according to the Swedish Annual Accounts Act (Årsredovisningslagen) the accounting must reproduce a fair image (Rättvisande bild) of the organizational practise (FAR, 2013). Regardless which depreciation acceleration is used, the cost depreciation is continuous; the changes in the accelerations are proportional. In addition, the cost-depreciation is based on the initial booked value on the tangible assets, which is permanent.

The cost-depreciation method is directed to that costs is recorded only when it is really incurred (i.e. when the asset has lost value) opposite to fair value which is more related to future cash flow expectations (Quagli & Avallone, 2010). Thus, Quagli and Avallone (2009) argue that the cost-depreciation method tend to reduce the agency costs, as the cost-depreciation is stable and predictable. In addition, Quagli and Avallone (2010) present that the cost-depreciation model is considered to be simple and less costly than the fair-value method. Watts (2003) argue that the less volatile accounting choice, the lower is the perceived risk by investors.

As mentioned before, the fair-value and cost-depreciation methods influence the accounting numbers in very different ways (Francis et al., 2004). According to Holthausen (1990) the cost-depreciation method symbolizes a conservative accounting choice. In contrary to the fair-value method the cost-depreciation method supports smoothness (Quagli & Avallone, 2010). The smoothness refers to a continuous value of the assets, due to the proportional depreciation (ibid). In addition, contrary to the fair-value model, the cost-depreciation model is criticised in the literature, due to the difficulty of making relevant comparable analysis.
(Holthausen, 1990). The booked value does not always symbolize the real value of the tangible assets, since the market is volatile and may change dramatically from one year to another. Thus, the cost-depreciation methods may increase the information asymmetry (Quagli & Avallone, 2010).

To summarize the characteristics of the fair-value method and the cost-depreciation method, the following model is illustrated (see table 1). As mentioned above, the motivator of managerial opportunism is excluded, since managers in municipal corporations do not have a compensation linked to profit (Collin et al., 2009)

Table 1. Characteristics of the fair-value and the cost-depreciation methods

<table>
<thead>
<tr>
<th>Motivators</th>
<th>Fair-value method</th>
<th>Cost-depreciation method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency costs</td>
<td>Increases</td>
<td>Reduces</td>
</tr>
<tr>
<td>Information asymmetry</td>
<td>Reduces</td>
<td>Increases</td>
</tr>
</tbody>
</table>

3.2 Dual role of municipal corporations

The section dual role of municipal corporations will be divided into three subsections; the role as a welfare function, the role as a business-like function and New Public Management (NPM) in municipal corporations. The three sections are connected and will be the base in order to derive factors, due to being a municipally owned corporation, that influence the accounting choice.

3.2.1 The role as a welfare function

The municipal corporations’ role as a welfare function is directed towards the welfare systems of the society (Holmberg, 2010). Municipal corporations act in a legal framework facing both national and international regulations, constraining the municipal corporations in general of acting in a capitalistic manner with the aim of profitability (Peda, 2012). According to Argento and Di Pietra (2014), European municipal corporations have to comply with national and European Union accounting rules. This in turn, leads to a homogenization of the organizational field (DiMaggio & Powell, 1983), and also influences the municipal organizations’ compliance to new legislations (Falkman & Tagesson, 2008). In addition, Collin et al. (2009) present how societal norms affect municipal corporations as being a welfare function in order to maximize the societal benefit, thus municipal corporations’ are being influenced by isomorphic pressures.
Peda (2012) discusses the connection between the society and the municipal corporations as accountability and argues that municipal corporations have a responsibility to account for their decisions and actions to the society. According to Lindqvist (2013) municipal corporations are hybrid organizations that are influenced by different stakeholders and act in a societal framework of, for instance, citizens, clients and the municipality (Lindqvist, 2013). Therefore, there is a necessity for the municipal corporations to account for their operations, since they are managing public equity (Thomasson, 2009).

Municipal corporation needs to meet the demands and goals set by both their owners (the municipality), as well as the society and its citizens. This makes them accountable for their actions and how they perform, which is explained by the term transparency which is a dimension of accountability (Peda, 2012). Transparency is defined as a process which requires organizations to disclose substantive and truthful information about the performance to those who are entitled to know (Lowenstein, 1996). The OECD (Organisation for Economic Co-operation and Development) (2002) sees transparency as an indication of good governance in the public sector as it provides reliable, relevant and timely information about the activities of government to the public. There are further suggestions that annual reports are appropriate communication channels to maintain an open dialogue with the stakeholder where finances, environmental issues and social responsibility are disclosed (OECD, 2010).

3.2.2 The role as a business-like function

The role as a business-like function refers to the municipal corporations actions on business-like terms. Municipal corporations are publicly owned by the municipalities in order to execute welfare programs to meet the expectations of the citizens (Holmberg, 2010). Nevertheless, they act on the capitalistic market facing operational risks and competitiveness similar to the privately owned corporations (Collin et al., 2009). Holmberg (2010) argues in the same direction as Collin et al. (2009) and present how municipal organizations are supposed to obtain social values, being a welfare function and act on the free market simultaneously. Holmberg (2010) explain the capitalistic responsibility as the commercial logic and the social responsibility is explained as the idealistic logic of the organizational practice.

Collin et al. (2009) derive their arguments based on the capitalistic focus through the use of positive accounting theory (PAT). PAT was founded by Watts and Zimmerman (1986) derived from the research of Friedmans (1953) when constructing the phenomena of positive
Schultz & Tran

research. PAT is a positive theory which explains and predicts the accounting choice by organizations (Collin et al., 2009). Furthermore, PAT is based on the central-economics-based assumption that the actions of all individuals are driven by self-interests (Watts and Zimmerman, 1986). Additionally, PAT predicts that all economic consequences of the accounting choice explain the motivation behind the choice (ibid). Furthermore, PAT explains how decisions within the organization are influenced by how the actions affect the amount of dividends to the owners (Collin et al., 2009). In addition, no morale or loyal concerns are regarded within the theoretical framework of PAT (ibid).

Watts and Zimmerman (1990) explains how PAT is aligned with the agency theory and conceptualize a relationship between the owners (principals) and the decision-making organs (agents). Collin et al. (2009) conclude that there is an agency-relationship which explains the actions in the municipal corporations. In the particular relationship, Collin et al. (2009) points out the society as the principal and the municipal corporations as the agents. Also, they present how "there is a separation between the agent and the principal that is so extensive that the discretion of making the accounting choice is assigned solely to the agent" (ibid, p. 146). Thus, in practice this means that the society can influence the accounting choice of the municipal corporations, but the final decision remains solely to the municipal corporations (ibid).

3.2.3 New Public Management (NPM) in municipal corporations

This section presents how the dual role of municipal corporations that is explained in the previous section is related to the implementation of new public management (NPM) (Bergmann, 2009). These new management techniques are directed to profitability in a less centralised public context (ibid). NPM makes more efficient operations possible, that is directed towards market competition and cost reduction (Mathiasen, 1999). The NPM changed the operations of public organizations, which led to hybrid organizations obtaining characteristics from both the private and public sector (Thomasson, 2009; Lindqvist, 2013).

The present research has found elements within the management and operations of municipal corporations that reflects the dual role, such as; managerial opportunism, political influence, accountability and board composition. (e.g. Hood, 1995; Thomasson, 2009; Collin et al., 2009; Carpenter & Feroz, 2001; Elbannan and McKinley, 2006; Broadbent and Guthrie, 2007; Martani & Lestiani, 2012). Thomasson (2009) argue that accountability is of great
interest to municipal corporations. Thus, they are being municipally owned and therefore accountable to their ultimate owner (i.e. citizens).

Collin et al. (2009) argue that the board within municipal corporations cannot be seen as a homogeneous group, since it contains of both representatives from the public sector as well as the private sector. These representatives may have different interests and ambitions influencing the municipal corporations (ibid). Furthermore, the representatives from the municipality (i.e. the public sector) have interests directed to the welfare systems of the society. In addition, the representatives from the private sector may have interests towards profitability and self-interest maximization (Collin et al., 2009).

In addition to the elements depicted above Hood (1995) stresses seven general changes within the in the municipal corporations’ management that are related to NPM. According to Bergman (2009) the NPM has led to a combination of management and goals directed to both the welfare as well in a profitable manner. Furthermore, the NPM consists of numerous important implications; NPM is an umbrella term encompassing a wide scope of different reforms ranging from organisational solutions to management control techniques and accounting (Thomasson, 2009). The seven changes in municipal corporations’ management presented by Hood (1995) are:

1. An increased establishment of organizations owned by the government, which operate in the capitalistic (private) market.
2. An escalated rate of competition both between public organizations as well as between public and private organizations.
3. An escalated rate of implementations of private management practices in public organizations.
4. A more efficiency oriented practise within the public sector, oriented towards cost minimizing and economy.
5. The managers within the public organizations became publicly known which led to more monitoring from the society.
6. An escalated rate of measurable performance metrics.
7. More organizational controls through predetermined production rules.

In addition, prior research shows that municipal corporations are also influenced by external factors. Carpenter and Feroz (2001) argue that external pressures influence the accounting
choice of municipal corporations. External pressures refer to pressures which the organizations can not directly influence or change. According to Carpenter and Feroz (2001) municipal corporations are in a higher extent influenced by external pressures than private corporations, due to being municipally owned. Prior research (e.g. Collin et al., 2009; Carpenter & Feroz, 2001; Elbannan and McKinley, 2006; Antonsen & Jørgensen, 1997) found the following external factors that influence the operations of municipal corporations:

1. Legal framework - legal laws and rights
2. Market competition - competition amongst and between both public and private corporations.
3. Political interference - the political influence on the organizations.
4. Monitoring – the level of external monitoring (scrutiny)

Due to the arguments presented above, this dissertation considers both internal and external factors which may influence accounting choice of municipal corporations. The external factors include: legal framework, market competition, political interference and monitoring. The internal factors include organizational structure, goals, financing, ownership and organizational control. To sum up the factors representing the dual role that is argued to influence the accounting choice in municipal corporations are illustrated in the following figure (see, figure 1).

<table>
<thead>
<tr>
<th>External factors</th>
<th>Internal factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Legal framework</td>
<td>5. Organizational structure</td>
</tr>
<tr>
<td>3. Political interference</td>
<td>7. Financing</td>
</tr>
<tr>
<td>4. Level of monitoring</td>
<td>8. Ownership</td>
</tr>
<tr>
<td></td>
<td>9. Organizational control</td>
</tr>
</tbody>
</table>

Figure 1. Factors of the dual role in municipal corporations

3.3 Hypotheses

The hypotheses are based on the theoretical framework depicted above. This section will consider the factors listed in section 3.2.3 (New Public Management (NPM) in municipal corporations) and furthermore in Figure 1 (Factors of the dual role, in municipal corporations) in order to hypothesize the influence of the dual role on the accounting choice (i.e. asset valuation). For each factor a specific hypotheses on its influence on accounting choice will be derived. All hypotheses are derived by taking into account the characteristics of the fair-value method and the cost-depreciation method illustrated in section 3.1
(Accounting choice) and furthermore in table 1 (Characteristics of the fair-value and the cost-depreciation methods). The section is divided into two subsections; external factors and internal factors.

3.3.1 External factors

In this section the external factors that influence the accounting choice in municipal corporations are illustrated. As already mentioned above, these factors include legal framework, market competition, political interference and level of monitoring (see Figure 1. Factors of the dual role in municipal corporations). Each factor is connected to the motivators of accounting choice depicted in the theoretical framework (agency costs and information asymmetry).

3.3.1.1 Legal framework

Privately owned corporations face different regulations compared to publicly owned corporation. In Sweden, there are two main legislations to comply with when being a municipal corporation. Firstly, there is the Municipal Act (Kommunallagen), and secondly there is the Swedish Companies Act, which the municipalities have to comply with. The Municipal Act is directed to ensure that the municipalities works within the welfare systems of the society. As stated in the Municipal Act chapter 2, 7 §:

"Kommuner och landsting får driva näringsverksamhet, om den drives utan vinstsyfte och går ut på att tillhandahålla allmännyttiga anläggningar eller tjänster åt medlemmarna i kommunen eller landstinget"

(Notisum, 2014)

This paragraph is based on the self-sufficient principle (självkostnadspricipen), which is stated in chapter 8, 3 §. The self-sufficient principle is directed towards an equilibrium, where the fees in municipal corporations not are allowed to be higher than the costs (Bohlin, 2007). Hence, the corporation should be managed without any profit creation (Holmberg, 2010). Thus the operations of the municipal corporations should be directed towards the welfare systems of the society (ibid).

Municipal corporations are also constrained to the geographical area and the specific citizens within the municipality. This is stated in chapter 2, 1 § and is known as the location-principle (lokaliseringspricipen). In practise, this paragraph frames municipally driven corporations to only operate within the borders of the municipality. In addition, the Municipal Act states
that, municipally owned corporations have to define the purpose of their operations. This is regulated in chapter 3, 17 §.

Municipal corporations, as well as private corporations, face the Swedish Companies Act (*Aktiebolagslagen*). The Swedish Companies Act frames all limited corporations in Sweden. This can lead to complications in the accounting behaviour; since the municipal corporation has to face the civil as well as the public law. Municipal corporations are created to improve the efficiency of the municipality's operations (Argento et al., 2010; London, 2002). Montin (1992) states while the primary goal of a private company is to make profit, the municipal corporations’ goals are blurry. As municipal corporations have to face both civil and public law, this leaves them in a twilight area where they have to respond to multiple legal contexts. Therefore, the legal framework may have an influence in the accounting choice, because it regulates the municipal corporation both from a private and a public perspective. Here, the private corporations have a major advantage since they do not have to oblige with the Municipal Act.

It is arguable that the factor of legal framework influences accounting choice. This is because the legal framework is related to information asymmetries. Firstly, municipal corporations are constrained by the Municipal Act to operate towards the welfare systems of the society. Thus, they should be accountable and transparent to their ultimate owner (i.e. the citizens) (Peda, 2012). Hence, it is arguable that municipal corporations will adopt the fair-value method in order to value tangible assets, because it will contribute to lessen information asymmetries to the society. Thus, it is arguable that municipal corporations that are highly influenced by the Municipal Act will adopt the fair-value method to lessen the information asymmetry.

As mentioned before, the fair-value method accounts the actual and relevant value of the assets (Quagli and Avallone, 2010). Thus, the trend in the private sector is to adopt the fair-value method, hence the information refers to the actual image of the corporation (Quagli and Avallone, 2010). This, in turn, should facilitate the decision-making processes by the investors and shareholders (Fields *et al.*, 2001). In addition, the global harmonization is directed towards the fair-value method, since it is considered to enhance the comparability of accounting data (Barlev & Haddad, 2007). Thus, it is arguable that municipal corporations that are highly influenced by the Swedish Companies Act also will adopt the fair-value
method to facilitate the decision-making processes by the investors and shareholders. Therefore, we hypothesis:

**Hypothesis 1a:** Municipal corporations that are highly influenced by the Municipal Act will adopt the fair-value method to value tangible assets.

**Hypothesis 1b:** Municipal corporations that are highly influenced by the Swedish Companies Act will adopt the fair-value method to value tangible assets.

3.3.1.2 Market competition

Traditionally municipalities have operated in a non-competitive market, since being separated from the private market. The creation of municipal corporations that operate on business-like terms in the private market has changed the market composition (Argento *et al*., 2010). There have been an increasing number of municipal operations that are run through limited corporations (Tagesson, 2007). The aim of the decentralizations of governments through various privatizations (e.g. municipal corporations) is to gain efficiency and the advantages that often are linked to the private corporations (Argento *et al*., 2010). These advantages refer to for instance market orientation and cost awareness (Collin, 2000).

By introducing municipal corporations to the private market they are being exposed by market competition (Almqvist, 2011). This is seen as a good way to ensure that the operations are efficient and thus gets the most value for the invested coin and furthermore are driven with cost-awareness (Boyne, 1998; Bailey, 1999). However, there have also been critiques to the market competition, because it creates turbulence, stress, risk and uncertainty for corporations (Mia & Clarke, 1999). In Sweden, the competition bureau (*konkurrensverket*) is the authority that monitors the level of competition and thus makes sure that the competition is fair. According to the Swedish Competition Authority (2010), municipalities are not allowed to offer services and products in a way that might limit the level of competition. The regulations differ between the different levels of public entities (i.e. state, country council or municipality) and between industries, but in general municipalities are not allowed to:

- under-price, in order to be compatible.
- favour relations with certain corporations without acceptable reasons.
- deny relations with certain corporations without acceptable reasons.
Konkurrenslag (2008:579) §27

It is arguable that the factor of market competition influences the accounting choice. This is because market competition is related to agency costs. Municipal corporations are not allowed to be driven in a way that limits the level of competition. Hence, they act in business-like terms facing the same level of competition as private corporations. Although, the municipality want the municipal corporations to act towards the welfare systems of the society.

The municipality (the principal) wants the operations of the municipal corporations (the agent) to be aligned with their interest (i.e. to the welfare systems of the society) (Collin et al., 2009). Therefore, it is arguable that the level of market competition may influence the motivator of agency costs. As the municipality want to make sure that the municipal corporations’ act aligned with the actions of the municipality. As mentioned before, the cost-depreciation method tends to reduce the agency costs. This is because; the cost-depreciation method is a stable and predictable method. Watts (2003) argue that the less volatile accounting choice, the lower is the perceived risk by investors. Thus we hypothesis:

**Hypothesis 2:** Municipal corporations that face a high level of market competition tend to adopt the cost-depreciation method to value tangible assets.

3.3.1.3 Political interference

Municipal corporations have to attend to demands from many stakeholders, such as clients, managers, government and citizens (Lindqvist, 2013). In contrary to private corporations, are municipal corporations controlled by the governments (Peda, 2012). According to Bozeman and Bretschneider (1994) the influence of political interference is determined on the level of publicness. Thus, corporations with a high level of publicness tend to be more influenced by political interference (Bozeman & Bretschneider, 1994). This is because municipal corporations, compared to private corporations, are to some extend owned by the municipality.

Political interference refers to the involvement of municipal politicians in the corporations' practise. Political interference is a well-known research field in governmental practise (e.g. Wehner & De Renzio, 2013). According to Tagesson, Klugman and Ektröm (2013) differences in political interference will not only be reflected in the politics driven by the municipality, but also in the information that the politicians choose to give to the voters (i.e.
Schultz & Tran

citizens). Politicians are viewed as serving in their own self-interest, to ensure success in elections and tenure in political power (Boubakri, Cosset & Saffar, 2008; Peda, 2012). In their strive for success and tenure, the political interference will affect which information that will be provided in the annual reports (Cuadrado-Ballesteros, Frías-Aceituno & Martínez-Ferrero, 2014). Therefore, it is arguable that political interference is a factor that influence the accounting choice.

The political interference can be reflected in the board of directors. The boards within municipal corporations cannot be seen as homogeneous groups (Collin et al., 2009). The board includes representatives from both the municipalities (i.e. political representatives) and from the corporations (ibid). This is the way for the municipality to control the operations of the municipal corporations and thus the aim towards the welfare systems of the society (Holmberg, 2010). The accounting in the public sector tend to be transparent (Cuadrado-Ballesteros et al., 2014), as they according to conventional wisdom favour the interests of stakeholders over shareholders (Boubakri et al., 2008; Peda, 2012).

Municipalities want to control the actions of the municipal corporations through political interference. Thus, it is arguable that the factor of political interference influences the accounting choice. This is because the political interference is related to agency costs. The municipalities wants to make sure that the operations of the municipal corporations are aligned with the welfare systems of the society.

Municipal corporations that face high political interference, face high agency costs as the municipality though political interference want to make sure that the operations of the municipal corporations are aligned with the welfare systems of the society. This is because the actions of the municipal corporations in turn may lead to votes from the citizens. Since the political interference lead to higher agency costs, the municipal corporations with high political interference may tend to adopt the cost-depreciation method. This is because, the cost-depreciation method is stable and predictable. Therefore, we hypotheses:

**Hypothesis 3:** Municipal corporations that face high level of municipal political interference will adopt the cost-depreciation method to value tangible assets.

3.3.1.4 Level of monitoring
The stakeholder theory supports the idea that the managers should consider the needs of all stakeholders and not only of the shareholders (Peda, 2012). Therefore, accountability will be
explained by considering the assumptions of stakeholder theory in order to highlight the information asymmetry between the owners (the society) and the managers. In addition, according to Holthausen and Leftwich (1983) in any democracy, there exists a principal-agent relationship between the people and the government.

The society elects political leaders to manage the government in a certain direction (Sörensen, 2007). Therefore, the society is entitled to hold the government accountable for their performance (Argento et al., 2010). Since the society elects the political leaders to manage the government in a certain direction the interests of the people and their representatives should be aligned (Lowenstein, 1996). Thus, the society has interests in an effective government and the political leaders’ have incentive to perform aligned with the societal expectations in order to be re-elected (Wettenhall, 2001; Boubakri et al., 2008; Peda, 2012). Nevertheless, according to Lowenstein (1996) it is difficult for the society to monitor the actions of the government, which in turn leads to information asymmetries. As discussed above in a greater extent to private corporations municipally owned corporations are accountable of their actions towards the society and furthermore the municipality (Peda, 2012).

Private corporations are not financed by public money and therefore do not face external pressures to be legitimate in the same extent as public corporations. As mentioned before, municipal corporations needs to meet the demands and goals set by both their owners (the municipality), as well as the society and its citizens (Holmberg, 2010). This makes them accountable for their actions and how they perform, which is explained by the term transparency which is a dimension of accountability (Peda, 2012). Transparency is defined as a process which requires organizations to disclose the performance substantively and truthfully to those who are entitled to know (Lowenstein, 1996). The OECD (Organisation for Economic Co-operation and Development (2002) sees transparency as an indication of good governance in the public sector as it provides reliable, relevant and timely information about the activities of government to the public. There are further suggestions that annual reports are appropriate communication channels to maintain an open dialogue with the stakeholder where finances, environmental issues and social responsibility are disclosed (OECD, 2010).

It is arguable that the factor of monitoring influences the accounting choice. This is because the level of monitoring is related to information asymmetry. According to Quaglivi and
Avallone (2010) in those contexts where information asymmetry exists, managers tend to choose accounting methods that reflect the operation in the corporation in a clear and reliable way. Therefore, due to the discussion above, one can argue that municipal corporations that face a high level of monitoring from the society tends to adopt reliable accounting methods in order to reduce the existing information asymmetry. Therefore, we hypothesis:

**Hypothesis 4:** Municipal corporations that face a high level of monitoring from the society will adopt the fair-value method to value tangible assets.

3.3.2 Internal factors

This section will illustrate the internal factors of the dual role of municipal corporations. The internal factors illustrated below are organizational structure, goals, financing, ownership and organizational control. Each factor is connected to the motivators of accounting choice depicted in the theoretical framework (agency costs and information asymmetry).

3.3.2.1 Organizational structure

The organizational structure is known to be different between the private and the public sector. According to Antonsen and Jørgensen (1997) private organizations are known to be unregulated and open, while public organizations tend to have a high rate of bureaucracy. The board of the municipal corporations can be viewed as a governance mechanism to ensure that the interests of the owners and managers are aligned (Peda, 2012). In contrary to private corporations, municipally owned corporations have politicians from the municipality represented in the board. The municipality tend to favour a high rate of bureaucracy, since the politicians from the municipality represented in the board may influence the organizational structure in the municipal corporation (Antonsen & Jørgensen, 1997).

The bureaucratic public organizational structure tends to have a high rate of external demands and goals towards the welfare systems of the society (Antonsen & Jørgensen, 1997). There tend to be more rules, meetings and control in the bureaucratic public sector than in the private sector (*ibid*). In comparison, the organizational structure in private corporations’ tends to be profit directed, with clear goals and ambitions towards efficiency (Collin *et al.*, 2009). Therefore, municipal corporations as being hybrid organizations apply different sets of organizational structures. The previous research discusses organizational structure through the level of centralization (Antonsen & Jørgensen, 1997).
Centralized organizational structure refers to a hierarchic organizational structure that is very bureaucratic. Furthermore, the operations and behaviours within the corporations are regulated and the level of managerial freedom is low. Thus, Morris and Jones (1999) argue that when the level of centralization (i.e. level of bureaucratic organization) is high, the organizational structure is hierarchal and strictly regulated (Morris & Jones, 1999). A decentralized organizational structure refers to devolution of decision power, which leads to a less hierarchic organizational structure. According to Morris and Jones (1999) a decentralized organizational structure is open and less regulated than a centralized organizational structure.

It is arguable that the factor of organizational structure influences the accounting choice, because it is related to agency costs. Municipal corporations that have a high level of centralization within the organizational structure (i.e. bureaucratic organizational structure), tend to have a high influence of public management. This would in turn mean that the municipalities (the principal) wants to make sure that the operations of the municipal corporations are aligned with the municipalities interests. As explained before, the accounting choice of the cost-depreciation method tend to reduce agency costs. This is because, the cost-depreciation is stable and predictable method. Thus, we hypothesis:

**Hypothesis 5**: Municipal corporations that have a centralized bureaucratic organizational structure tend to adopt the cost-depreciation method to value tangible assets.

3.3.2.2 Goals

The general goals in the private sector are directed to make profit, and in order to do so they optimize the day-to-day operations and other strategies. Thus, they want to increase the efficiency and thereby increase the profitability level (Adolfsson & Solli, 2009). The public sector, in turn, is known to have goals directed towards the welfare systems of the society (Holmberg, 2010). The differences in the goals and aims between the municipal and the private corporation are thus factors that have an impact on the accounting choices. Due to the implementation of NPM, the hybrid corporations (i.e. municipal corporations) can have goals and ambitions that are both public and private in character.

Municipal corporations act in an institutional twilight area, in which they obtain characteristics from both the private and public sectors (Collin et al., 2009). To which extent these goals are in either direction, has a direct influence on the choice of accounting methods.
Because of the fact that the municipal corporation exerts a welfare function (Holmberg, 2010), one could state that the municipal corporation wants to be seen as trustworthy, transparent and accountable for their actions (Peda, 2012). Also, the NPM has led to a stronger financial control of the municipal corporations from their owners, because the information asymmetry is higher after the decentralization (Almqvist, 2011). As mentioned above, the goals in the private sector are known to be directed towards profitability (Adolfsson & Solli, 2009). But in the public sector, the goals are more directed to the welfare systems of the society. Furthermore, goals as; providing neglected services, increase the welfare systems or goals directed to better working conditions (Thomasson, 2009).

It is arguable that the factor of goals influences the accounting choice, since it is related to agency costs. Municipal corporations with a high level of private oriented goals (i.e. directed to profitability) may have more incentives of actions in a business-like manner. In comparison, the municipal corporations with a high rate of public oriented goals (i.e. directed towards the welfare systems of the society) may have less incentives of actions in business-like manner. Thus, municipal corporations with a high level of public-oriented goals tend to use the cost-depreciation method to value tangible assets since it reduce the agency costs. Therefore, we hypothesis:

**Hypothesis 6a:** There is a positive correlation between the rate of public-oriented goals and the use of the cost-depreciation method to value tangible assets.

**Hypothesis 6b:** There is a positive correlation between the rate of private-oriented goals and the use of the fair-value method to value tangible assets.

3.3.2.3 Financing

The financing between the private and public sector are different. The public sector is financed by the citizens through income tax, while the private sector is financed by the incomes from the operations within the corporation (Meyer, Månsson & Nilsson, 2013). Therefore, the private corporations are financed due to their profitability level. This leads to a dual role, where the municipal corporations may be financed both from the public sector as well as from the profitability level of the corporation (Holmberg, 2010; Thomasson, 2009).

The municipality are allowed to allocate and financially support municipal corporations as long as it is directed to the welfare systems of the society (2 chapter, 8 § Municipal Act). However, the municipality may never financially support individual persons or private
companies (*enskilda näringsverksamheter*). The municipality may financially support the municipal corporations through shareholder contributions, lending guarantees or other subventions. According to Lindquist (2005) the amount of financial support from the municipality is regulated through the proportional-principle. The proportional-principle implies that the amount of financial support should be equivalent with the gains to the welfare systems of the society. Furthermore, the gains in the welfare systems of the society is complex to measure, since the welfare systems is of a qualitative kind. Nevertheless, quantitative measures can be used such as; employment degree and environmental emissions (Bohlin, 2007).

As mentioned above the municipality may financially support corporations, although the Municipal Act 2:nd chapter 8§ stress that there has to be extraordinary reasons. This extraordinary reasons are defined in the government proposition from 1990/91:117 (*Regeringens proposition 1990/91:117*). These reasons are defined as;

1. The function is directed to the welfare systems of the society.
2. The function is directed to reduce the degree of unemployment.
3. Underpricing.
4. Reduced level of service.

The financial support from the municipality to municipal corporations in the real-estate industry is further developed in the proposition to the government from 2009/10:185 (*Prop. 2009/10:185 Allmännyttiga kommunala bostadsaktiebolag och reformerade hyressättningsregler*). This states that municipalities may financially support the municipal real-estate corporation if there is a need to reconstruct the corporation, and if there is a need of for settlements in the geographical area. Nevertheless, this is in direct conflict with the European rules, which states that governmental financial support is in general not allowed (*EUF-fördragets artikel 107.1*). However, financial support from municipalities is still implemented to municipal corporations (Lindquist, 2005).

It is arguable that the factor of financing influences the accounting choice. This is because the financing is related to the agency costs. The financing of the municipal corporation may affect the management of the corporation (Hood, 1995). According to Thomasson (2009), the degree of finance from the public sector affect the caution of the management. The capital that are financed from the public sector are bound to the citizens and are therefore
monitored in a greater extent than the capital that are financed from the private sector (Diefenbach, 2011). Thus, municipal corporations that have a high rate of financing from the public sector tend to have high agency costs. To reduce the agency costs the accounting method of cost-depreciation is preferable. This is because, the cost-depreciation is a stable and predictable method. Watts (2003) argue that the less volatile accounting choice, the lower is the perceived risk by investors.

In similarity to the financing from the public sector, the financing from the private sector also affects the accounting. This is because the private investors have interests in aligning the actions of the managers with their own interests (Collin et al., 2009). This is explained in the positive accounting theory, with the fundamental economic assumption that the actions of all individuals are directed to self-interest. Thus, the private investor wants to reduce the opportunistic behaviour of the managers and hence reduce the agency costs. As mentioned before, in order to reduce the agency costs the accounting method of cost-depreciation is preferable. Thus, we hypothesis:

**Hypothesis 7a:** There is a positive correlation between the financing from the public sector and the use of cost-depreciation method to value tangible assets.

**Hypothesis 7b:** There is a positive correlation between the financing from the private sector and the use of cost-depreciation method to value tangible assets.

### 3.3.2.4 Ownership

Organizations in the private sector can have different ownership structures. It can be listed on a stock exchange, where investors can trade shares and become owners. It can also be fully private with one owner, or it could also be a family company. However, in the case of municipal corporations, it is not unusual that they are fully owned by the municipality (Collin & Tagesson, 2010).

The decentralization of municipal activities has led to a separation of the ownership and control (Collin & Tagesson, 2010), which according to the agency theory can create agency costs and information asymmetry (Fama & Jensen, 1983; Jensen & Meckling, 1976). This means that managers are in control for the day-to-day operations and have more information than the owners (Cullinan, Wang, Wang & Zhang, 2012). Even if the municipalities have less involvement in the direct provision of their services; they are still responsible to ensure the reliability and quality in delivering services. In other words, Peda (2012) mean that 'the
provision of public services can be viewed as a specific legal responsibility of governments, while the production of these services as a technical and economic activity may be carried out by public or private institutions' (p. 63).

The process of decentralizations requires new skill and orientation from the local government (i.e. municipality) because it has to steer the provider (i.e. municipal corporations) and organize contracting activities (Grossi & Reichard, 2008). The contract makes it possible to achieve coherence and predictability in the contractor-provider relationship (Peda, 2012). It also stipulates clear conditions about what has been agreed to, what to deliver, who to pay and other obligations (Lane, 1999). Thus, the municipality is left with the responsibility to define strategies and priorities and also to coordinate and monitor the delivery of services in an efficient and effective manner according to the service contract (Peda, 2012).

It is arguable that the factor of ownership influences the accounting choice. This factor is related to both information asymmetry and agency costs. The higher rate of public ownership leads to stronger external pressures to be accountable. As mentioned before, municipal corporations need to meet the demands and goals set by both their owners (the municipality), as well as the society and its citizens (Holmberg, 2010). This would indicate, the use of the fair-value method, since it reduce the information asymmetry.

The ownership could as mentioned before also influence the accounting choice, as it is related to the agency costs. The interests from the private and the public sector may differ. This could mean, that the more the ownership from the private sector, the more agency costs. This is because the managers have incentives in self-interest. Thus, the owners wants to ensure that their and the managers interests are aligned. In order to reduce the agency costs the accounting method of cost-depreciation is preferable. This is because the cost-depreciation is stable and predictable method. The primary aim of municipal corporations is to act towards the welfare systems of the society. Thus, the ownership structure directly influences the accountability of the municipal corporations. Hence, it is arguable that the motivator of information asymmetry is dominant in this case. Thus we hypothesize:

_Hypothesis 8a:_ There is a positive correlation between the rate of public ownership and the use of the fair-value method to value tangible assets.

_Hypothesis 8b:_ There is a positive correlation between the rate of private ownership and the use of the cost-depreciation method to value tangible assets.
3.3.2.5 Organizational control

There is a need for municipal corporations to meet the demands and goals set by their managers, as well as the society and its citizens (Holmberg, 2010). This has lead to questioning of municipal corporations due to their governance and lack of accountability (Anderson & Isaksson, 2005). Thus, Collin et al. (2009) argue that monitoring of public corporations is more intense than of private corporations. Furthermore, Montin (1992) argue that a public corporation must address the societal norms and expectations on a greater level then private corporations have to do. Thus, the organizational control tends to be more severe in public corporations then in private corporations.

Organizational controls refer to the internal controls in the corporations; such as policies and directives. Organizational control is directed to all levels and areas of the corporation, in order to make sure that there is a homogenous behaviour in the whole corporation (Montin, 1992). According to Lindqvist (2013) publicly owned corporations are controlled by internal controls such as directives and guidelines in a greater extent than privately owned corporations. This is because the organizational control influences the level of risk within the corporations. The more internal controls, the lower are the risk of mistakes and accidents.

It is arguable that the factor of organizational control influences the accounting choice. This is because it is related to agency costs. Organizational control is implemented by the municipalities (the principal) in order to make sure that the municipal corporations (the agent) act aligned with the municipalities’ interest. Therefore, the higher rate of organizational control, the higher rate of agency costs. This in turn, as mentioned before would indicate the use of the cost-depreciation method, since it reduces the agency costs. To reduce the agency costs the accounting method of cost-depreciation is preferable. This is because, the cost-depreciation is stable and predictable method. Watts (2003) argue that the less volatile accounting choice, the lower is the perceived risk by investors. Thus, we hypothesis:

**Hypothesis 9:** Municipal corporations with a high level of organizational control, tend to adopt the cost-depreciation method to value tangible assets.

To summarize the hypotheses the following model is illustrated (see Table 2. Hypotheses). The table inludes the all factors of the dual role of municipal corporations as well as the hypotheses directed to the influences on accounting choice.
Table 2. Hypotheses

<table>
<thead>
<tr>
<th>External factors</th>
<th>Hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal framework</td>
<td><strong>Hypothesis 1a:</strong> Municipal corporations that are highly influenced by the Municipal Act will adopt the fair-value method to value tangible assets.</td>
</tr>
<tr>
<td></td>
<td><strong>Hypothesis 1b:</strong> Municipal corporations that are highly influenced by the Swedish Companies Act will adopt the fair-value method to value tangible assets.</td>
</tr>
<tr>
<td>Market competition</td>
<td><strong>Hypothesis 2:</strong> Municipal corporations that face a high level of competition tend to the cost-depreciation method to value tangible assets.</td>
</tr>
<tr>
<td>Political interference</td>
<td><strong>Hypothesis 3:</strong> Municipal corporations that face high levels of municipal political interference will adopt the cost-depreciation method to value tangible assets.</td>
</tr>
<tr>
<td>Level of monitoring</td>
<td><strong>Hypothesis 4:</strong> Municipal corporations that face a high level of monitoring from the society will adopt the fair-value method to value tangible assets.</td>
</tr>
<tr>
<td>Internal factors</td>
<td>Hypotheses</td>
</tr>
<tr>
<td>Organizational structure</td>
<td><strong>Hypothesis 5:</strong> Municipal corporations that have a centralized bureaucratic organizational structure tend to adopt the cost-depreciation method to value tangible assets.</td>
</tr>
<tr>
<td>Goals</td>
<td><strong>Hypothesis 6a:</strong> There is a positive correlation between the rate of public-oriented goals and the use of the cost-depreciation method to value tangible assets.</td>
</tr>
<tr>
<td></td>
<td><strong>Hypothesis 6b:</strong> There is a positive correlation between the rate of private-oriented goals and the use of the fair-value method to value tangible assets.</td>
</tr>
<tr>
<td>Financing</td>
<td><strong>Hypothesis 7a:</strong> There is a positive correlation between the financing from the public sector and the use of cost-depreciation method to value tangible assets.</td>
</tr>
<tr>
<td></td>
<td><strong>Hypothesis 7b:</strong> There is a positive correlation between the financing from the private sector and the use of cost-depreciation method to value tangible assets.</td>
</tr>
<tr>
<td>Ownership</td>
<td><strong>Hypothesis 8a:</strong> There is a positive correlation between the rate of public ownership and the use of the fair-value method to value tangible assets.</td>
</tr>
<tr>
<td></td>
<td><strong>Hypothesis 8b:</strong> There is a positive correlation between the rate of private ownership and the use of the cost-depreciation method to value tangible assets.</td>
</tr>
<tr>
<td>Organizational control</td>
<td><strong>Hypothesis 9:</strong> Municipal corporations’ with a high level of organizational control tends to adopt the cost-depreciation method to value tangible assets.</td>
</tr>
</tbody>
</table>
3.4 Theoretical model building

The theoretical model is summarizing the theory explained in theoretical framework. The model includes all factors identified in order to illustrate the dual role of municipal corporations influence on accounting choice.

![Diagram showing factors influencing accounting choice](image)

**External factors**
1. Legal framework
2. Market competition
3. Political interference
4. Level of monitoring

**Internal factors**
5. Organizational structure
6. Goals and incentives
7. Financing
8. Ownership
9. Organizational control

Figure 2. Factors of the dual role in municipal corporations influence on accounting choice
4. Empirical method

In this chapter the empirical method of the dissertations is presented. First the research strategy and the literary search are displayed, secondly the population is presented and the data collection method explained. This is followed by the operationalization of the dependent, independent and control variables. The chapter ends with the presentation of how data analysis will be performed and the reliability and validity of the study.

4.1 Literary search and review

The research process is developed through different stages, starting with a comprehensive literary search in order to investigate the field of study. The literary search was mainly focused on Kristianstad University’s search engine SummonHKR and Lund University’s search engine LUBsearch. The key terms and phrases used in the literary search were: Municipal corporations, governmental organizations, governmental structure, municipal management, and new public management. The fundamental terms were combined with the phrases directly connected to the aim of the study such as: Accounting choice, decision-making, organizational structure, accounting change, in order to find research on municipal corporations’ dual role in society as well as accounting choice in different contexts.

The search for scientific articles within the focused research field resulted in the finding of an article named Organisational and accounting change: theoretical and empirical reflections and thoughts on a future research agenda by Broadbent and Laughlin (2005). The research agenda offered a useful framework in order to structure this dissertation, since the article presents a broad-scoped research agenda including issues important to policy and practice within public-private corporations. Furthermore, the search for scientific articles resulted in the finding of Accounting-related research in PPPs/PFIs: present contributions and future opportunities by Andon (2012). The article used the research agenda by Broadbent and Laughlin (2005) in order to review the consisting studies with in the field of public-private corporations. Andon (2012) found 97 publications in all, reflecting the contributions of 107 (co-)authors over a period of 14 years. The article highlights a number of areas to which the research can be further extended within the field of study. For instance, Andon (2012) stress a need to question the nature and functioning of municipal corporations and consider the complexities of these in action. The article by Broadbent and Laughlin (2005) combined with the review by Andon (2012) highlights the research gaps within public-private corporations in connection to accounting choice. In addition, the articles inspired and
influenced the structure of this dissertation, as well as being a source for articles during the theory development stage.

In the search of scientific articles, the journals were critically judged using our own reflections. All sources were overviewed objectively in order to feel comfort using them in the research process. In addition to articles related to the theoretical framework and the focused field of study, also methodological as well as research-philosophy literature has been gathered in order to structure the dissertation in the norms of scientific manners.

4.2 Population
This dissertation is restricted towards the geographical area of Sweden. In addition, Asset value loss is an accounting choice that only is significant to corporations with tangible assets. Hence, corporations without tangible assets such as service-oriented corporations cannot be examined through the accounting choice of asset value loss (FAR, 2013). Thus this dissertation is directed towards the real-estate sector. The decision to limit the Swedish municipal corporation into the specific real-estate sector was made, due to personal contacts within municipal real-state corporations which facilitated the communication in that field of area. The communication with the municipal corporations in the real-estate sector proved that asset value loss is of great interest and that municipal corporations tend to adopt either the fair-value method or the cost-depreciation. In addition, the real-state sector is commonly debated within the in Swedish media, due to high earnings. Furthermore, according to Quaglì and Avallone (2010) the significance of asset value loss is high in the real-estate sector.

According to Nelson, Potter and Wilde (1999) after adjustment to inflation, 80 percent of the real-estate corporations’ market value lie within tangible assets. Thus, the asset value loss is of great interest to the municipal corporations acting in the real estate field. Nevertheless, there is no reason that the influence from the factors of the dual role should not be generalizable to other branches, since the factors not are specific to asset value loss.

The base for identifying Swedish municipal real-estate corporations’ was SABO (the Swedish Association of Public Housing Companies). SABO is an industry and interest organisation for public housing companies in Sweden. Furthermore, they offer service and guidelines to provide good operational conditions for its member companies and positive development of rental property. There are 281 registered member companies in SABO, which will make the population of this study.

44
4.3. Data collection method
The empirical collection method is based on a primary data collected through a questionnaire with cross-sectional design. The questionnaire is in the form of a survey distributed to the municipal corporations using email as distribution channel. Furthermore, the empirical study limited to the geographical area of Sweden, thus the questionnaire was sent out in Swedish (appendix 1). However, the questionnaire is translated into English (appendix 2). According to Bryman and Bell (2011) there might be limitations using the web as distribution channel. For instance, the email-addresses might be unveiled or not leading directly to the focused respondents causing numerous transactions of information within the corporations. If the corporations for some reason do not answer to the questionnaire a reminder will be send out a few days later to make sure to get an as high answer rate as possible.

4.4 Operationalization of the survey
Operationalization refers to the process where the researchers convert their concepts into measures (Bryman & Bell, 2011). The aim is to produce measures that can be indicators explaining the research question in focus (Saunders et al., 2009). In this dissertation hypotheses are conducted in the theoretical framework section. The hypotheses work as base formulating measures, in order to make the indications valid in order to examine what factors of the dual role within municipal corporations that influence the accounting choice.

The questionnaire in this study includes 20 questions. The first five questions are directed towards the control variables and obtaining background information of the corporations. The following 15 questions are directed towards the independent variables and the dependent variable. In the sections below the measures are divided in dependent, independent and control variables.

4.4.1 The dependent variable
The aim of the study is to examine what factors of municipal corporations dual role that influence the accounting choice. Fields et al. (2001) defined accounting choice as any decision with the primary purpose to influence the output of the accounting system in a particular way. This means that accounting choices are not neutral but can influence the financial performance achieved in a fiscal year (ibid). As mentioned before, this dissertation will adopt the asset value loss as accounting choice.
To examine the dependent variable the questions have been derived from the Quagli and Avallone (2010) and their study of asset value loss. According to Quagli and Avallone (2010) corporations may adopt both the cost-depreciation method as well as the fair-value method in order to value tangible assets. Thus, there does not have to be a fixed choice between the methods. In order to examine the accounting methods to value tangible assets, the questions towards the dependent variable are constructed with a Likert-scale, which means that the respondents have a scale (i.e. the answer can be more or less agree, due to a scale). The scale will contain seven levels, where the higher levels refer to an agreement and the lower levels refers to a disagreement.

The answers with the values of 1-3 address a low agreement with the question. Furthermore, answers with the values of 5-7 address a high agreement with the question. Those who answer 4 are considered to be neither high nor low. The use of a Likert-scale enables the possibility for the respondents to state to what degree they adopt both the cost-depreciation method and the fair-value method. According to Saunders et al. (2009) the use of a Likert-scale enhances the validity of the survey and reduces the measurement errors. The survey includes two questions directed towards examining the dependent variable both of the questions are derived from the study by Quagli and Avallone (2010). The questions are number six and seven in the questionnaire (see appendix 1).

Therefore, to know which accounting method that is used to value tangible assets, the following questions will be asked:

**Question: To what extent does the municipal corporation use the fair-value method to value the tangible assets?**

(The aim of this question is to know in which extent the municipal corporation use the cost-depreciation method)

**Question: To what extent does the municipal corporation use the fair-value method to value the tangible assets?**

(The aim of this question is to know in which extent the municipal corporation use the fair-value method)
4.4.2 Independent variable

The aim of the study is to examine what factors of municipal corporations’ dual role influence the accounting choice. As mentioned before, the new public management (NPM) changed the function of public organizations, which led to hybrid organizations obtaining characteristics from both the private and public sector (Thomasson, 2009). In the theoretical framework, nine factors of the dual role in municipal corporations were derived from prior research, those were: Legal framework, market competition, political interference, level of monitoring, organizational structure, goals, financing, ownership and organizational control. These nine factors will be used as independent variables that affect the accounting choice in municipal corporations.

In the questionnaire these factors was reworked into questions in order to examine the hypotheses from the theoretical framework. The questions are derived from prior studies in the field of area. The study by Collin et al. (2009) has been the base of constructing questions, thus their study was directed towards accounting choices in municipal corporations as well. The questions directed towards the dual role of municipal corporations are the ones from question 8-20. The questions are similar to those towards the dependent variable constructed as a Likert-scale. The scale is used to capture the respondents’ opinion. Therefore, the questions are formulated as “to what extent” questions. Furthermore, in the subsections all of the factors that will be used as independent variables are presented and the interpretation of the answer values on the Likert-scale are presented.

4.4.2.1 Legal framework

There are different options and possibilities considering accounting choice, although the municipal corporations have to remain within the legal framework (Collin et al. 2009). As explained in the hypothesis section municipal corporations tend to account in order to comply with external pressures such as legal frameworks. In Sweden, there are two main legislations to comply with when being a municipal corporation. Firstly, there is the Municipal Act (Kommunallagen), and secondly there is the Swedish Companies Act (Aktiebolagslagen). The Swedish Companies Act (Aktiebolagslagen) addresses how corporations operate such as, articles of association (bolagsordning) and company management. Therefore the following questions are asked;
Question: To what extent do you feel that your organization is governed by the Swedish Companies Act? (The aim is to capture to what extent the municipal corporation is controlled by the Swedish Companies Act)

The municipal corporations with high answer rates (5-7) address a high influence of the Swedish Companies Act, which would indicate the use of reliable accounting method (fair value method).

The Municipal Act (Kommunallagen) is directed towards profitability limitations, in order to make sure that the municipal corporations act as a welfare function. Therefore the following question is asked:

Question: To what extent do you feel that your organization is governed by the Municipal Act? (The aim is to capture to what extent the municipal corporation is controlled by the Municipal Act)

The municipal corporations with high answer rates (5-7) address a high influence of Municipal Act, furthermore which would indicate the use of a reliable accounting method (fair value method).

4.4.2.2 Market competition

There have been an increasing number of municipal operations that are run through limited companies (Tagesson, 2007). The reason of doing this is because it is supposed to gain efficiency and advantages that often are linked to the private corporations, for instance market orientation and cost awareness (Collin, 2000). This has led to efficiency orientated function of municipal corporations (Argento et al., 2013). In order to capture the market competition that influence municipal corporations, the following question is asked;

Question: To what extent do you feel that your organization is influenced by market competition? (The aim is to capture into what extent municipal corporations is influenced by market competition)

The municipal corporations with high answer rates (5-7) address a high influence of market competition, furthermore which would indicate the use of a reliable accounting method (fair value method). The municipal corporations with low answer rates (1-3) address a low influence of market competition, which would indicate the use of a simpler and not so costly accounting method (cost-depreciation).
4.4.2.3 Political interference
Municipalities and furthermore municipal corporations have the primary aim of being a welfare function to the society (Meyer, Månsson & Nilsson, 2013). As explained earlier, the municipal corporations needs to meet the demands and goals set by both their owners (the municipalities), as well as the society and its citizens. This makes them accountable for their actions and how they perform, which is explained by the term transparency which is a dimension of accountability (Peda, 2012).

Question: To what extent do you feel that your organization is influenced by political interference from the municipality? (The aim is to capture to what extent the municipal corporation is influenced by political interference from the municipality)

The municipal corporations with high answer rates (5-7) address a high influence of political interference, furthermore, which would indicate the use of the cost-depreciation method to value tangible assets.

4.4.2.4 Level of monitoring
Public corporations are questioned due to their governance and lack of accountability (Anderson & Isaksson, 2005). Private corporations are not financed by public money and therefore do not face external pressure to be legitimate in the same extent as public corporations. To measure the level of monitoring from the society that influence the municipal corporations, the following question is asked;

Question: To what extent do you feel that the municipal corporation is exposed to monitoring from the society? (The aim is to capture to what extent the municipal corporation is monitored by the society)

The municipal corporations with high answer rates (5-7) address a high monitoring from the society, which would indicate the use of a reliable accounting method (fair value method). The municipal corporations with low answer rates (1-3) address low monitoring from the society, which would indicate the use of a simpler and not so costly accounting method (cost-depreciation).

4.4.2.5 Organizational structure
Organizational structures within public organizations are known to be different from the private sector. According to Antonsen and Jørgensen (1997) private organizations are known
to be unregulated and open. In addition, according to Antonsen and Jørgensen (1997) the public organizations are known to be strict and bureaucratic. To measure if the municipal corporations have a strict and bureaucratic organizational structure, the following question is asked;

*Question:* To what extent do you feel that the employees are involved in decision making processes?

(The aim is to capture to what extent the organizational structure bureaucratic)

The municipal corporations with high answer rates (5-7) address a high influence of public-orientation in the organizational structure, which would indicate the use of the cost-depreciation method.

4.4.2.6 Goals

Due to the implementation of NPM, the hybrid corporations (i.e. municipal corporations) can have goals and ambitions that are both public and private in character. The goal of the companies in the private sector is to increase the efficiency and thereby increase the profitability level (Adolfsson & Solli, 2009). The goals of the public sector are in contrary to the private sector known to be directed into the welfare of the society (Holmberg 2010). To measure the level of goals directed to profitability (i.e. private-oriented goals) the following question is asked;

*Question:* To what extent do you feel that the goals of the municipal corporation are directed towards the welfare systems of the society? (The aim is to capture to what extent the goals of the municipal corporation are directed towards public-oriented goals)

The municipal corporations with high answer rates (5-7) address a high rate of goals directed towards welfare of the society, which would indicate the use of a reliable accounting method (fair-value method). The municipal corporations with low answer rates (1-3) address a low rate of goals directed towards welfare of the society, which would indicate a simple and less costly accounting method (cost-depreciation method).

*Question:* To what extent do you feel that the goals of the municipal corporation are directed towards profitability? (The aim is to capture to what extent the goals of the municipal corporation are directed towards private-oriented goals)
The municipal corporations with high answer rates (5-7) address a high rate of goals directed towards profitability, which would indicate the use of a simple and less costly accounting method (cost-depreciation method). The municipal corporations with low answer rates (1-3) address a low rate of goals directed towards profitability, which would indicate a reliable accounting method (fair-value method).

4.4.2.7 Financing
The financing between the private and public sector are different. The public sector is financed by the citizens through income tax, while the private sector is financed by the incomes from the operations within the corporation (Meyer, Månsson & Nilsson, 2013). To measure the level of financing from the private respective the public sector within the municipal corporation the following questions are asked:

**Question:** To what extent do you feel that the municipal corporation is financed by the public sector? (The aim is to capture to what extent the financing of the municipal corporations is made by the public sector)

The municipal corporations with high answer rates (5-7) address a high rate of finance from the public sector, which would indicate the use of a simple and not so costly accounting method (cost-depreciation method).

**Question:** To what extent do you feel that the municipal corporation is financed by the private sector? (The aim is to capture to what extent the financing of the municipal corporations is made by the private sector).

The municipal corporations with high answer rates (5-7) address a high rate of finance from the private sector, which would indicate the use of a reliable accounting method (fair-value method).

4.4.2.8 Ownership
The decentralization has led to a separation of the ownership and management within municipal corporations (Fama & Jensen, 1983; Jensen & Meckling, 1976). Public centralized organizations are totally owned by the public sector, while private corporations are owned by the private sector. The decentralization depicted above has led to municipal corporations with a decentralized ownership including both the private and public sector. To measure the level
of ownership from the public sector within the municipal corporation the following question is asked:

*Question: To what extent do you feel that the municipal corporation is owned by the public sector?* (The aim is to capture to what extent the municipal corporations is owned by the public sector).

The municipal corporations with high answer rates (5-7) address a high rate of ownership from the public sector, which would indicate the use of a reliable accounting method (fair-value method). The municipal corporations with low answer rates (1-3) address a low rate of ownership from the public sector, which would indicate a simple and less costly accounting method (cost-depreciation method).

To measure the level of ownership from the private sector within the municipal corporation the following question is asked:

*Question: To what extent do you feel that the municipal corporation is owned by the private sector?* (The aim is to capture to what extent the municipal corporations is owned by the public sector)

The municipal corporations with high answer rates (5-7) address a high rate of ownership from the private sector, which would indicate the use of a simple and not so costly accounting method (cost depreciation method). The municipal corporations with low answer rates (1-3) address a low rate of ownership from the private sector, which would indicate a reliable accounting method (fair-value method).

4.4.2.9 Organizational control

The prior research argues that there is a need for municipal corporations to meet the demands and goals set by their managers, as well as the society and its citizens (Holmberg, 2010). Thus, Collin *et al.* (2009) argue that monitoring of public corporations are more intense then private corporations. Furthermore, Montin (1992) argue that a public corporation must address the societal norms and expectations on a greater level then private corporations have to do. Thus, the organizational control tends to be more severe in public corporations than in private corporations. Therefore, to measure the level the of organizational control the follow question is asked:
Question: To what extent do you feel that the municipal corporation is controlled by internal policies and directives? (The aim is to capture to what extent the municipal corporations is controlled by internal policies and directives and therefore organizational control)

The municipal corporations with high answer rates (5-7) address a high level of organizational control, which would indicate the use of a reliable accounting method (fair-value method). The municipal corporations with low answer rates (1-3) address a mild organizational control, which would indicate the use of a simple and not so costly accounting method (cost depreciation method).

To summarize the questions derived from the hypotheses due to the factors influence on accounting choice, two models are illustrated. The first model is directed towards the external factors and illustrates the questions that will be asked (see table 4). The second model is directed towards the internal factors and illustrates the questions that will be asked (see table 4)
### Table 3. External factors and questions

<table>
<thead>
<tr>
<th>External Factors</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal framework</td>
<td>To what extent do you feel that your organization is governed by the Swedish Companies Act?</td>
</tr>
<tr>
<td></td>
<td>To what extent do you feel that your organization is governed by the Municipal Act?</td>
</tr>
<tr>
<td>Market competition</td>
<td>To what extent do you feel that your organization is influenced by market competition?</td>
</tr>
<tr>
<td>Political interference</td>
<td>To what extent do you feel that your organization is influenced by political interference from the municipality?</td>
</tr>
<tr>
<td>Level of monitoring</td>
<td>To what extent do you feel that the municipal corporation is exposed to monitoring from the society?</td>
</tr>
</tbody>
</table>

The table below illustrate the questions directed towards the internal factors (see table 4).

### Table 4. Internal factors and questions

<table>
<thead>
<tr>
<th>Internal factors</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational structure</td>
<td>To what extent do you feel that the employees are involved in decision making processes?</td>
</tr>
<tr>
<td>Goals</td>
<td>To what extent do you feel that the goals of the municipal corporation are directed towards profitability?</td>
</tr>
<tr>
<td></td>
<td>To what extent do you feel that the goals of the municipal corporation are directed towards the welfare systems of the society?</td>
</tr>
<tr>
<td>Financing</td>
<td>To what extent do you feel that the municipal corporation is financed by the public sector?</td>
</tr>
<tr>
<td></td>
<td>To what extent do you feel that the municipal corporation is financed by the private sector?</td>
</tr>
<tr>
<td>Ownership</td>
<td>To what extent do you feel that the municipal corporation is owned by the public sector?</td>
</tr>
<tr>
<td></td>
<td>To what extent do you feel that the municipal corporation is owned by the private sector?</td>
</tr>
<tr>
<td>Organizational control</td>
<td>To what extent do you feel that you are regulated and framed by the organizational control?</td>
</tr>
</tbody>
</table>

#### 4.4.3. Control variables

The first five questions in the questionnaire are directed towards the control variables. The control variables in this study will be the respondent organizational-position, financial outcome, number of employees as well as geographical location. The control variables are
directed towards the background information of the corporations. In the subsections below the control variables are presented and the questions in order to measure them are illustrated.

4.4.3.1 Respondent organizational position
The organizational position may affect the result of the questionnaire, thus education and knowledge may influence the answers (Collin et al., 2009). The knowledge in accounting must be advanced in order to complete the questionnaire, therefore the control variable of organizational position is chosen in this dissertation. The aim is to reach someone in the economic department with knowledge about the function of the corporation like; financial manager or CFO. Therefore the follow question will be asked:

*Question: What is your organizational position?*

Alternatives:

1. CEO
2. CFO
3. Working in the economic department
4. Other

(The aim of the question is to make sure that the survey reaches someone with knowledge enough to answer the following questions within the survey)

4.4.3.2 Financial outcome
The financial outcome differs in a large range among the municipal corporations in the real-estate sector (Collin et al., 2009). There is a possibility that the profitability level influence the accounting choice. Therefore, is the financial outcome chosen as control variable in this dissertation. According to (Collin et al., 2009) a possible way to classify financial outcome in municipal corporation is through the turnover. In addition, the financial outcome and furthermore the turnover is a commonly used control variable to measure size. Therefore the following question is asked:

*Question: What was the turnover in the fiscal year of 2013?* (The aim is to see if the municipal corporation has a high turnover or not, since it may differ. Furthermore turnover is a variable in order to determine the size of the corporations.)
4.4.3.3 Number of employees
The need of employees may differ among municipal corporations thus their operations are directed towards the needs within the welfare systems of the society. Hence, the number of employees can be used as a variable for size. Therefore, the following question will be asked:

*Question: How many employees does the municipal corporation have?* (The aim is to see determine the size of the municipal corporations, since it may differ. Furthermore, number of employees is a variable in order to determine the size of the corporations.)

4.4.3.4 Geographical location
The geographical location of the municipal corporations may affect the questionnaire since the different municipalities have different owner directives conducting, for instance goals for financial outcome as well as the wealth within the corporation (Lindqvist, 2013). In addition, the municipal corporations are not equally spread within the geographical area of Sweden; there is a much higher concentration within the southern parts, due to a higher rate of communities (SABO, 2014). Therefore, the following question will be asked:

*Question: Where is the geographical location of the municipal corporation?* (The aim is to see determine the geographical location of the municipal corporations)

Alternatives:

1. Malmo
2. Gothenburg
3. Stockholm
4. Other

(The aim is to see if the municipal corporation is located in any major city or not)

4.5 Pilot-study
In a pilot-study, the questionnaire is tested in a small segment of the population in order to make sure the questions are relevant and understandable (Bryman & Bell, 2009). The aim of the pilot-study is to identify possible misunderstandings and problems in the questionnaire before it is sent out to the whole population (Saunders *et al*., 2009). According to Saunders *et al*., (2009) the pilot-study should be sent to a segment of the population that reflects the respondents in the population in a good way. In this dissertation, the pilot-study was directed
towards the CFO at AB Kristianstadsbyggen. AB Kristianstadsbyggen is a municipally owned corporation in the geographical area of Kristianstad.

AB Kristianstadsbyggen was one of the municipal corporations that would have been examined in the final population. Thus, one can argue that AB Kristianstadsbyggen reflects the total population in a good way. In addition, the pilot-study was directed towards the CFO at AB Kristianstadsbyggen. The position as CFO reflects the wanted organizational position in the survey. AB Kristianstadsbyggen found the questionnaire precise and understandable, only small formulation issues considering word order was noticed. Thus, no major changes were made in the questionnaire before it was sent out to the total population.

4.6 Data analysis
The empirical data was statistically analysed in SPSS. All variables are initially tested in a Kolmogorov-Smirnov statistic in order to test the normality of the variables. After that, the hypotheses were tested using a Spearman’s test. The hypotheses were tested with a significance level of 5%. Thus, the hypotheses will be supported if p < 0.05. Secondly, a correlation matrix will be done in order to find statistically significant relationships between the independent variables. According to Pallant (2010) this could be further studied through a multi linear regression, furthermore, only the coefficient table with the collinearity statistics were noted. If there are independent variables that are proven to be correlating with each other, they will be removed. Secondly, the independent variables that are left will be tested together with the dependent variable in a logistic regression.

4.7 Reliability
Reliability refers to continuous results of the empirical study given the same context. Eventual variation in the measurement depends on variations within the measuring object and not due to the deficiencies within the construction of the empirical study (Denscombe, 2009). Thus, the construction of the empirical study is vital in order to conduct reliable results (Bryman and Bell, 2011). This dissertation use conceptualization of the complex underlying institutional nature derived from a theoretical framework developed from previous research within the field of area. Denscombe (2009) states that using an abstract framework in order to derive hypotheses enhance the reliability of the study.
4.8 Validity

Validity implies that the research methods being conducted within the study are generally accepted methods (Denscombe, 2009). Furthermore, if the chosen measurements within the empirical study cover the essential questions in the research field, whether the collected data refers to the actual image of the research field, in a comprehensive way (ibid). Bryman and Bell (2011) present that checking the measurement with experts or experienced researchers within the field of study creates validity to the study. In this dissertation, the questionnaire was conducted in collaboration with lectors at Kristianstad University as well as being controlled by an unbiased person within the field study to make sure that the measurement are viable and the variables are capturing the important questions. This was made by a pilot-study which is explained in section 4.5 (pilot study).

Denscombe (2009) points out three arguments creating validity within quantitative studies. Firstly, checking that the empirical data was collected in an accurate and complete way. In this dissertation, all the data was controlled manually before it was analysed with digital instruments, in order to make sure that the answers were complete and relevant. Secondly, ensure that the empirical study measured the right variables. In this research, all variables were derived from the theoretical framework and furthermore the hypotheses in order to secure the validity within the measures. Thirdly, make sure that the explanations derived from the empirical study are correct. In this dissertation, as stated in the second argument, all the variables were derived from the hypotheses in order to secure a red line combining theory, empirical study, analysis as well as conclusions.

4.9 Generalizability

Generalizability is a measure in order to reflect the applicability of the study on other fields (Denscombe, 2009). In this dissertation the hypotheses are derived from an abstract theoretical framework, which strengthens the generalizability of the study (Bryman & Bell, 2011). The empirical study is implemented within the geographical area of Sweden; therefore the generalizability is limited to the Swedish context (Denscombe, 2009). Furthermore, the study is focused on municipal corporations, which limits the generalizability into the specific field of study. In addition, the empirical study only conducted a segment of the population, the real-estate branch. Nevertheless, there is no reason that the chosen segment does not reflect the whole population.
4.10 Ethical considerations

The empirical study was conducted through a questionnaire distributed by email. The web-sites to the Swedish municipal real-estate corporations was collected from SABO (Sveriges allmännyttiga nostadsföretag). Furthermore, due to ethical consideration the web-sites were scanned for contact information directly to the CFO. By doing so, the survey automatically was sent to the right department within in the corporations and the respondents were prepared for the task handed to them. In addition, the questionnaire was complemented with information about the study, including the purpose and the aim of the study as well as contact-information to the authors.

There was a few of the Swedish municipal real-estate corporations that did not present any contact information to individuals, instead they presented an information-mail. This information mail is aimed for any possible questions and goes to the receptions at the corporations. Thus, those Swedish municipal real-estate corporations were instructed in the mail to forward the mail to the CFO.

5. Analysis

In this chapter the outcomes of the survey are presented. First, the descriptive statistics of the respondents, and the dependent, independent and control variables are presented. Then the results of the correlation and linear regression test are displayed. This chapter ends with a summary of the results.

5.1. Descriptive statistics

To provide an overview, this section starts with a descriptive presentation of the empirical findings. Firstly, the respondents are analysed followed by a presentation of the control variables organizational position, financial outcome, number of employees and geographical location. Secondly, descriptive statistics of dependent and independent variables are presented.

All variables are normally distributed (i.e. there is a normality in all the data), which was tested by a one-sample Kolmogorov-Smirnov Test. Furthermore, this study only contains one question directed to each factor, thus no Cronbach’s Alpha-test was required to determine internal consistency.
5.1.1 Respondents
As stated before, the source of the population was the organizations called SABO (*Sveriges Allmännyttiga Bostadsorganisation*) the identified population consisted of 281 municipal real-estate corporations in Sweden. An e-mail with a link to the survey was sent to all identified corporations. Table 5.1 shows the response frequency of the responses.

**Table 5. Respondents**

<table>
<thead>
<tr>
<th>Response frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>281</td>
</tr>
<tr>
<td>Blocked Emails</td>
<td>0</td>
</tr>
<tr>
<td>Bounced Emails</td>
<td>1</td>
</tr>
<tr>
<td>Recipients that unregistered</td>
<td>12</td>
</tr>
<tr>
<td>Non-responses</td>
<td>178</td>
</tr>
<tr>
<td>Number of responses</td>
<td>90</td>
</tr>
<tr>
<td>Disqualified Surveys</td>
<td>0</td>
</tr>
<tr>
<td><strong>Valid Surveys</strong></td>
<td><strong>90</strong></td>
</tr>
</tbody>
</table>

Of the sent surveys, one of the email-addresses was invalid and therefore bounced. Twelve individuals chose to actively unregister from the survey. The survey was open for respondents for five days with only one reminder after three days, which can explain the high number of non-responses. This gives a total response rate of 32 percent (90 answers), which is considered to be sufficient.

The sex of the respondents was almost equally divided and there was no major difference in the response rate between the sexes. The frequency of the sex of the respondents is illustrated below (see table 6).
### Table 6. Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>48</td>
<td>53.3</td>
</tr>
<tr>
<td>Female</td>
<td>42</td>
<td>46.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

#### 5.1.2 Control variables

In this section the control variables of organizational position, financial outcome, number of employees and geographical location is analysed.

##### 5.1.2.1 Organizational position

The questionnaire was directed towards the financial manager, since the respondents must have a considerable financial knowledge of the corporations in order to answer the questionnaire in a correct way. The organizational position is illustrated in the table below (see table 7).

### Table 7. Organizational position

<table>
<thead>
<tr>
<th>Organizational position</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEO</td>
<td>15</td>
<td>16.7</td>
</tr>
<tr>
<td>CFO</td>
<td>62</td>
<td>68.9</td>
</tr>
<tr>
<td>Working in the economic department</td>
<td>12</td>
<td>13.3</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The table shows a higher answer rate from CFOs (68.9 percent). The explanation of this might be that when the surveys were sent out, they were in first hand sent out to the CFOs. The answer rates from CEOs and those who works in the business department were respectively 16.7 percent and 13.3 percent. The answer rate from others were 1.1 percent.

##### 5.1.2.2 Financial outcome

The financial outcome may differ dramatically thus, it is of interest to analyse the financial outcomes of the municipal real-estate corporations. The financial outcomes of the municipal real-estate corporations are presented in the table below (see table 8).
### Table 8. Financial outcome

<table>
<thead>
<tr>
<th>Turnover</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>90</td>
<td>12000000</td>
<td>1779400000</td>
<td>217547962,3</td>
</tr>
<tr>
<td>Minimum</td>
<td></td>
<td></td>
<td></td>
<td>296331245,3</td>
</tr>
<tr>
<td>Maximum</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Std. deviation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To measure the financial outcome, a question about the corporations’ turnover in fiscal year 2013 was asked. Of the 90 answers, the results show that the minimum turnover in the sample was 12000000 SEK and the maximum was 1779400000 SEK. Furthermore, the mean in the sample is 217547962,3 SEK and the standard deviation is 296331245,3. This indicates that the maximum turnover is an extreme value (outlier).

#### 5.1.2.3 Number of employees

Number of employees is a measurement for size. In the table below the number of employees of the studied municipal real-estate corporations are illustrated (see table 9).

### Table 9. Number of employees

<table>
<thead>
<tr>
<th>Number of employees</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>90</td>
<td>0</td>
<td>280</td>
<td>49</td>
</tr>
<tr>
<td>Minimum</td>
<td></td>
<td></td>
<td></td>
<td>54</td>
</tr>
<tr>
<td>Maximum</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Std. deviation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The mean number of employees is 49. In the sample there was a recipient that answered that they did not have any employees, which could indicate that the corporation is inactive. The minimum value is hence 0 and the maximum value is 280. The standard deviation in the result is 53,692.

#### 5.1.2.4 Geographical location

Since this is a total population study, it is important to show how the responses are distributed geographically. In the table below the geographical locations of the respondents are presented (see table 10).
Table 10. Geographical location

<table>
<thead>
<tr>
<th>Geographical location</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gothenburg</td>
<td>3</td>
<td>3,3</td>
</tr>
<tr>
<td>Malmo</td>
<td>1</td>
<td>1,1</td>
</tr>
<tr>
<td>Stockholm</td>
<td>4</td>
<td>4,4</td>
</tr>
<tr>
<td>Other</td>
<td>82</td>
<td>91,1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

As shown in table 11 (Geographical location), one can see that the frequency rate is very high from recipients outside the three major cities in Sweden, since the alternative 'Other' represents 82 out of 90. This is gives a percent of 91,1 percent. From this, it is arguable that the answers from the recipients are evenly spread across Sweden.

5.1.3 Dependent variables

The dependent variable is, as stated before, accounting choice parameter of asset value loss. The results from the questionnaire proved that municipal corporations in general use both the cost-depreciation and the fair-value method in order to value tangible assets. The table below shows an overview of the results of the dependent variable from the survey (see table 11).

Table 11. Asset value loss

<table>
<thead>
<tr>
<th>Method</th>
<th>N</th>
<th>Mean</th>
<th>Std.Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair-value method</td>
<td>90</td>
<td>3,1444</td>
<td>2,14403</td>
</tr>
<tr>
<td>Cost-depreciation method</td>
<td>90</td>
<td>5,1333</td>
<td>1,95569</td>
</tr>
</tbody>
</table>

The question where we asked 'To which extent do you use the fair-value method to value tangible assets?' received a mean answer of 3,1444 on a 7 point scale. The standard deviation was 2,14403. The cost-depreciation method also shows a range of 6, but has a higher mean. The question 'To which extent do you use the fair-value method to value tangible assets?' received a mean of 5,1333 and a standard deviation of 1,95569. The assumption based on the communication with the municipal corporation in the real-estate sector was that they would adopt either the fair-value method or the cost-depreciation method. The results of the questionnaire showed that some municipal corporations use both methods in a high extent. This contradicts the assumption.
The dependent variable is shown in a Likert-scale, thus the regression cannot be statistically measured and thus there are values for both the question directed towards the fair-value method as well as the cost-depreciation method. Therefore the dependent variable will be recoded into a dummy variable with the cost-depreciation as 1 and fair-value method as 0.

### 5.1.4 Independent variables

The nine independent variables, in this study are divided in external and internal variables. The external variables are; legal framework, market competition, political interference and level of monitoring. The internal variables are organizational structure, goals, financing, ownership and organizational control.

#### 5.1.4.1 External variables

In the subsection external variables are the following variables included: Legal framework, market competition, political interference and level of monitoring.

**Legal Framework**

Legal framework is measured in two aspects. The first aspect measures the extent of regulation from the Municipal Act and the second aspect measures the extent of regulation from the Swedish Companies Act. In the survey the factor political influence was measured through the questions: To which extent do you feel that you are regulated by the Municipal Act? And To which extent do you feel that you are regulated by the Swedish Companies Act? In the table below is the statistics of the question towards the Municipal Act illustrated (see table 12).

**Table 12. Question towards the Municipal Act**

<table>
<thead>
<tr>
<th>Value</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>5.6</td>
</tr>
<tr>
<td>2</td>
<td>13</td>
<td>14.4</td>
</tr>
<tr>
<td>3</td>
<td>20</td>
<td>22.2</td>
</tr>
<tr>
<td>4</td>
<td>10</td>
<td>11.1</td>
</tr>
<tr>
<td>5</td>
<td>15</td>
<td>16.7</td>
</tr>
<tr>
<td>6</td>
<td>15</td>
<td>16.7</td>
</tr>
<tr>
<td>7</td>
<td>12</td>
<td>13.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The results of the first question, *To which extent do you feel that you are regulated by the Municipal Act*, received a mean of 4.22, which may indicate that the corporations feel that
they are slightly regulated by the Municipal Act. The frequency of this question was evenly spread across the 7 point Likert-scale.

In the table below is the statistics of the question towards the Swedish Companies Act illustrated (see table 13).

**Table 13. Question towards the Swedish Companies Act**

<table>
<thead>
<tr>
<th>Value</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td>5</td>
<td>11</td>
<td>12.2</td>
</tr>
<tr>
<td>6</td>
<td>21</td>
<td>23.3</td>
</tr>
<tr>
<td>7</td>
<td>50</td>
<td>55.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The results of the second question, 'To which extent do you feel that you are regulated by the Swedish Companies Act?', on the other hand gave a much higher mean value, as it reached 6.12 on the 7 point scale. In addition, the answers are very skewed as 55.6 percent answered with a 7 and 23.3 percent answered with a 6. This indicates that the corporation feel much regulated by the Swedish Companies Act.

**Market competition**

In the survey the factor market competition was measured through the question: *To what extent do you feel that your organization is influenced by market competition?* In the table below the statistics of the question considering market competition is illustrated (see table 14).
Table 14. Question towards market competition

To what extent do you feel that your organization is influenced by market competition?

<table>
<thead>
<tr>
<th>Value</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>11,1</td>
</tr>
<tr>
<td>2</td>
<td>17</td>
<td>18,9</td>
</tr>
<tr>
<td>3</td>
<td>17</td>
<td>18,9</td>
</tr>
<tr>
<td>4</td>
<td>13</td>
<td>14,4</td>
</tr>
<tr>
<td>5</td>
<td>11</td>
<td>12,2</td>
</tr>
<tr>
<td>6</td>
<td>14</td>
<td>15,6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>8,9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The question about how influenced the corporations were by market competition resulted in a mean value of 3,8 and the highest frequencies were observed in the values of 2 and 3, where both had 18,9 percent. However, the frequencies are evenly spread across the values. This makes it hard to determine whether the municipal corporations feel influenced by market competition or not.

Political interference

In the survey the factor political influence was measured through the question: *To what extent do you feel that your organization is influenced by political interference from the municipality?* In the table below the statistics of the question considering political interference is illustrated (see table 15).

Table 15. Question towards political interference

To what extent do you feel that your organization is influenced by political interference from the municipality?

<table>
<thead>
<tr>
<th>Value</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>2,2</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>4,4</td>
</tr>
<tr>
<td>3</td>
<td>9</td>
<td>10,0</td>
</tr>
<tr>
<td>4</td>
<td>13</td>
<td>14,4</td>
</tr>
<tr>
<td>5</td>
<td>18</td>
<td>20,0</td>
</tr>
<tr>
<td>6</td>
<td>30</td>
<td>33,3</td>
</tr>
<tr>
<td>7</td>
<td>14</td>
<td>15,6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The question for political interference resulted in a mean value of 5,08 with the standard deviation of 1,508. Furthermore, 68,9 percent answered the values of 5, 6 or 7, while 16,6
percent answered the values of 1, 2 or 3. This indicates that the municipal corporations are in a higher extent influenced by political interference from the municipality.

**Level of monitoring**

In the survey the factor level of monitoring was measured through the question: *To what extent do you feel that the municipal corporation is exposed to monitoring from the society?*

In the table below the statistics of the question considering level of monitoring is illustrated (see table 16).

**Table 16. Question towards level of monitoring**

<table>
<thead>
<tr>
<th>Value</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1,1</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>5,6</td>
</tr>
<tr>
<td>3</td>
<td>12</td>
<td>13,3</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
<td>8,9</td>
</tr>
<tr>
<td>5</td>
<td>26</td>
<td>28,9</td>
</tr>
<tr>
<td>6</td>
<td>20</td>
<td>22,2</td>
</tr>
<tr>
<td>7</td>
<td>18</td>
<td>20,0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The question for level of monitoring resulted in a mean value of 5.06 and a standard deviation of 1.53. 71.1 percent answered the values of 5, 6 or 7, while 20 percent answered the values of 1, 2 or 3. This indicates that the municipal corporations feel exposed to monitoring from the society, and thus feel much scrutinized.

5.1.3.2 Internal variables

**Organizational structure**

In the survey the factor of organizational structure was measured through the question: *To what extent do you feel that employees are involved in decision making processes?* In the table below the statistics of the questions considering the goals is illustrated (see table 17).
Table 17. Question towards the organizational structure

To what extent do you feel that employees are involved in decision making processes?

<table>
<thead>
<tr>
<th>Value</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>2,2</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>4,4</td>
</tr>
<tr>
<td>3</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>20</td>
<td>22,2</td>
</tr>
<tr>
<td>5</td>
<td>30</td>
<td>33,3</td>
</tr>
<tr>
<td>6</td>
<td>23</td>
<td>25,6</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>2,2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The question for goals that are directed towards profitability resulted in a mean value of 4,66 and 61,1 percent answered the values of 5,6 or 7, while 16,6 answered the values of 1,2 or 3. This indicates that the municipal corporations consider themselves having a considerable organizational freedom and are included in the decision making processes.

Goals

In the survey the factor of goals was measured through the questions: *To what extent do you feel that the goals of the municipal corporation are directed towards profitability?* And *to what extent do you feel that the goals of the municipal corporation are directed towards the welfare systems of the society?* In the tables below the statistics of the questions considering the goals is illustrated (see table 18).

Table 18. Question towards profitability

To what extent do you feel that the goals of the municipal corporation are directed towards profitability?

<table>
<thead>
<tr>
<th>Value</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>1,1</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>5,6</td>
</tr>
<tr>
<td>4</td>
<td>12</td>
<td>13,3</td>
</tr>
<tr>
<td>5</td>
<td>31</td>
<td>34,4</td>
</tr>
<tr>
<td>6</td>
<td>26</td>
<td>28,9</td>
</tr>
<tr>
<td>7</td>
<td>15</td>
<td>16,7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The question for goals that are directed towards profitability resulted in a mean of 5,01 and 71,1 percent answered the values of 5,6 or 7. This indicates that the municipal corporations consider themselves having a high extent of goals directed towards profitability (see table 19).
Table 19. Question towards the welfare systems of the society

To what extent do you feel that the goals of the municipal corporation are directed towards the welfare systems of the society?

<table>
<thead>
<tr>
<th>Value</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1,1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>2,2</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
<td>8,9</td>
</tr>
<tr>
<td>4</td>
<td>15</td>
<td>16,7</td>
</tr>
<tr>
<td>5</td>
<td>28</td>
<td>31,1</td>
</tr>
<tr>
<td>6</td>
<td>30</td>
<td>33,3</td>
</tr>
<tr>
<td>7</td>
<td>6</td>
<td>6,7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The question for goals that are directed towards welfare systems of the society resulted in a mean of 5,34 only and over 71,1 percent answered the values of 5,6 or 7. This indicates that the municipal corporations consider themselves having a high extent of goals directed towards the welfare systems of the society.

**Financing**

In the survey the financing was measured through the questions: To what extent do you feel that the municipal corporation is financed by the public sector? And to what extent do you feel that the municipal corporation is financed by the private sector? In the table below the statistics of the question considering financing by the private sector is illustrated (see table 20).

Table 20. Question towards the financing from the private sector

To what extent do you feel that the municipal corporation is financed by the private sector?

<table>
<thead>
<tr>
<th>Value</th>
<th>Frequency</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>3,3</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
<td>7,8</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>7,8</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>5,6</td>
</tr>
<tr>
<td>5</td>
<td>22</td>
<td>24,4</td>
</tr>
<tr>
<td>6</td>
<td>29</td>
<td>32,2</td>
</tr>
<tr>
<td>7</td>
<td>17</td>
<td>18,9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The question towards the financing by the private sector resulted in a mean of 5,22 and 75,5 percent answered the values of 5,6 or 7 and only 18,9 percent answered the value of 1,2 or 3.
This indicates that the municipal corporations consider themselves being financed by the private sector to a high extent.

In the table below the statistics of the questions considering financing by the public sector is illustrated (see table 21).

**Table 21. Question towards the financing from the public sector**

<table>
<thead>
<tr>
<th>Value</th>
<th>Frequency</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>25</td>
<td>27.8</td>
</tr>
<tr>
<td>2</td>
<td>25</td>
<td>27.8</td>
</tr>
<tr>
<td>3</td>
<td>20</td>
<td>22.2</td>
</tr>
<tr>
<td>4</td>
<td>9</td>
<td>10.0</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>5.6</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>4.4</td>
</tr>
<tr>
<td>7</td>
<td>25</td>
<td>27.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The question towards the ownership by the public sector resulted in a mean of 2.6, only 12.2 percent answered the values of 5.6 or 7 and 77.8 percent answered the values of 1,2 or 3. This indicates that the municipal corporations consider themselves being not being financed by the public sector to a high extent.

**Ownership**

In the survey the ownership was measured through the questions: *To what extent do you feel that the municipal corporation is owned by the public sector?* And *to what extent do you feel that the municipal corporation is owned by the private sector?* In the table below the statistics of the question considering ownership by the public sector is illustrated (see table 22).
Table 22. Question towards the ownership be the public sector

To what extent do you feel that the municipal corporation is owned by the public sector?

<table>
<thead>
<tr>
<th>Value</th>
<th>Frequency</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>4,4</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>1,1</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>3,3</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>1,1</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>4,4</td>
</tr>
<tr>
<td>6</td>
<td>5</td>
<td>5,6</td>
</tr>
<tr>
<td>7</td>
<td>72</td>
<td>80,0</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>100</td>
</tr>
</tbody>
</table>

The question towards the ownership by the public sector resulted in a mean of 6.37 and 80 percent answered the value 7 and only 4.4 percent answered the value of 1. This indicates that the municipal corporations consider themselves being mostly owned by the public sector.

In the table below the statistics of the question considering ownership by the private sector is illustrated (see table 23).

Table 23. Question towards the ownership be the public sector

To what extent do you feel that the municipal corporation is owned by the private sector?

<table>
<thead>
<tr>
<th>Value</th>
<th>Frequency</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>81</td>
<td>90</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>4,4</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>3,3</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>1,1</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>1,1</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>100</td>
</tr>
</tbody>
</table>

The question towards the ownership by the private sector resulted in a mean of 1.23 and 90 percent answered the value of 1 and only 1.1 percent answered the value of 7. The question towards the ownership by the public sector resulted in a mean of 6.37 and 80 percent answered the value 7 and only 4.4 percent answered the value of 1. This indicates that the municipal corporations consider themselves not being owned by the private sector to a high extent.
Organizational control

In the survey the organizational control was measured through the question: *To what extent do you feel that you are regulated and framed by the organizational control?* In the table below the statistics of the question considering organizational control is illustrated (see table 24).

**Table 24. Question towards the organizational control**

<table>
<thead>
<tr>
<th>Value</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>3.3</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>7.8</td>
</tr>
<tr>
<td>4</td>
<td>22</td>
<td>24.4</td>
</tr>
<tr>
<td>5</td>
<td>28</td>
<td>31.1</td>
</tr>
<tr>
<td>6</td>
<td>25</td>
<td>27.8</td>
</tr>
<tr>
<td>7</td>
<td>5</td>
<td>5.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

It is hard to determine whether the municipal corporations are ruled by internal organizational control in a high rate or not. However, 31.1 percent answered a rate of 5 on the 7 point scale and only 24.4 percent answered 4 on the 7 point scale. Although there is normality in the data, it is slightly directed towards a high rate of internal organizational control. This is also strengthened with the mean of 4.89.

5.1.3.3 Summary of the independent variables

The independent variables are summarized in the model below (see table 25). The model includes all independent variables and the mean values as well as standard deviations.
Table 25. Summary of the independent variables

<table>
<thead>
<tr>
<th>Factors</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal framework</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Municipal Act</td>
<td>4.22</td>
<td>1.822</td>
</tr>
<tr>
<td>Swedish Companies Act</td>
<td>6.12</td>
<td>1.373</td>
</tr>
<tr>
<td>Market competition</td>
<td>3.8</td>
<td>1.868</td>
</tr>
<tr>
<td>Political interference</td>
<td>5.08</td>
<td>1.508</td>
</tr>
<tr>
<td>Level of monitoring</td>
<td>5.08</td>
<td>1.531</td>
</tr>
<tr>
<td>Organizational structure</td>
<td>4.66</td>
<td>1.273</td>
</tr>
<tr>
<td>Goals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Towards profitability</td>
<td>5.01</td>
<td>1.232</td>
</tr>
<tr>
<td>Towards the welfare systems</td>
<td>5.34</td>
<td>1.143</td>
</tr>
<tr>
<td>Financing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Publicly financed</td>
<td>2.6</td>
<td>1.527</td>
</tr>
<tr>
<td>Privately financed</td>
<td>5.12</td>
<td>1.641</td>
</tr>
<tr>
<td>Ownership</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Publicly owned</td>
<td>6.37</td>
<td>1.539</td>
</tr>
<tr>
<td>Privately owned</td>
<td>1.23</td>
<td>0.9</td>
</tr>
<tr>
<td>Organizational control</td>
<td>4.89</td>
<td>1.165</td>
</tr>
</tbody>
</table>

5.1.5 Hypotheses Testing

In this section the hypotheses developed in the theory chapter will be statistically tested, to determine whether they are rejected or not. The hypotheses significance will be statistically tested through a Spearman Correlation test. According to Pallant (2010) significance levels are at 1 percent and 5 percent preferable and thus they will respectively be classified as high and low levels of significance in this study. The section hypotheses testing will be divided into the subsections of external variables and internal variables.

5.1.5.1 External variables

In the subsection external variables the hypotheses considering: Legal framework, market competition, political interference and level of monitoring will be statistically tested.

Legal framework

**Hypothesis 1a:** Municipal corporations that are highly influenced by the Municipal Act will adopt the fair-value method to value tangible assets.

The correlation between the variables in hypothesis 1 proved no significance. Thus, there are no significant relation between the influence of the Municipal Act and the use of the fair-value method. Therefore, the hypothesis is not supported.
**Hypothesis 1b:** Municipal corporations that are highly influenced by the Swedish Companies Act will adopt the fair-value method to value tangible assets.

The correlation between the variables in hypothesis 2 proved no significance. Thus, there are no significant relation between the influence of the Swedish Companies Act and the use of the fair-value method. Therefore, the hypothesis is not supported.

**Market competition**

**Hypothesis 2:** Municipal corporations that face a high level of competition tend to the cost-depreciation method to value tangible assets.

The correlation between the variables in hypothesis 2 proved no significance. Thus, there is no significant relation between the influences of high level of competition the use of the cost-depreciation method. Therefore, the hypothesis is not supported.

**Political interference**

**Hypothesis 3:** Municipal corporations that face high level of municipal political interference will adopt the cost-depreciation method to value tangible assets.

The correlation between the variables in hypothesis 3 proved no significance. Thus, there are no significant relation between high level of municipal political interference and the use of the cost-depreciation method. Therefore, the hypothesis is not supported.

**Level of monitoring**

**Hypothesis 4:** Municipal corporations that face a high level of monitoring from the society will adopt the fair-value method to value tangible assets.

The correlation between the variables in hypothesis 4 proved no significance. Thus, there are no significant relation between the influence of a high level of monitoring and the use of the fair-value method. Therefore, the hypothesis is not supported.

5.1.5.2 Internal variables

In the subsection internal variables the hypotheses considering: Organizational structure, goals, financing, ownership and organizational control will be statistically tested.
Organizational structure

**Hypothesis 5:** Municipal corporations that have a centralized bureaucratic organizational structure tend to adopt the cost-depreciation method to value tangible assets.

The correlation between the variables in hypothesis 5 proved no significance. Thus, there are no significant relation between high level of municipal political interference and the use of the cost-depreciation method. Therefore, the hypothesis is not supported.

Goals

**Hypothesis 6a:** There is a positive correlation between the rate of public-oriented goals and the use of the cost-depreciation method to value tangible assets.

The correlation between the variables in hypothesis 6a proved no significance. Thus, there are no significant relation between the rate of public-oriented goals and the use of the cost-depreciation method. Therefore, the hypothesis is not supported.

**Hypothesis 6b:** There is a positive correlation between the rate of private-oriented goals and the use of the fair-value method to value tangible assets.

The correlation between the variables in hypothesis 6b proved no significance. Thus, there are no significant relation between the rate of private-oriented goals and the use of the cost-depreciation method. Therefore, the hypothesis is not supported.

Financing

**Hypothesis 7:** There is a positive correlation between the financing from the public sector and the use of cost-depreciation method to value tangible assets.

The correlation between the variables in hypothesis 7 proved no significance. Thus, there are no significant relation between the financing from the public sector and the use of the cost-depreciation method. Therefore, the hypothesis is not supported.

**Hypothesis 7b:** There is a positive correlation between the financing from the private sector and the use of cost-depreciation method to value tangible assets.

The correlation between the variables in hypothesis 7b proved no significance. Thus, there are no significant relation between the financing from the private sector and the use of the cost-depreciation method.
Ownership

**Hypothesis 8a:** There is a positive correlation between the rate of public ownership and the use of the fair-value method to value tangible assets.

The correlation between the variables in hypothesis 8 proved no significance. Thus, there are no significant relation between the rate of public ownership and the use of the fair-value method. Therefore, the hypothesis is not supported.

**Hypothesis 8b:** There is a positive correlation between the rate of private ownership and the use of the cost-depreciation method to value tangible assets.

The correlation between the variables in hypothesis 8b proved no significance. Thus, there are no significant relation between the rate of private ownership and the use of the cost-depreciation method. Therefore, the hypothesis is not supported.

Organizational control

**Hypothesis 9:** Municipal corporations with a high level of organizational control, tend to adopt the cost-depreciation method to value tangible assets.

The correlation between the variables in hypothesis 9 proved no significance. Thus, there are no significant relation between a high level of organizational control and the use of the cost-depreciation method. Therefore, the hypothesis is not supported.

5.1.5.3 Summary of the hypotheses testing

In the table below the results of the hypotheses testing is illustrated (see table 26)
Table 26. Summary of the hypotheses testing

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Hypotheses</th>
<th>Spearman correlation</th>
<th>Support/ No support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal framework</td>
<td>Hypothesis 1a</td>
<td>0.150</td>
<td>No support</td>
</tr>
<tr>
<td></td>
<td>Hypothesis 1b</td>
<td>0.411</td>
<td>No support</td>
</tr>
<tr>
<td>Market completion</td>
<td>Hypothesis 2</td>
<td>0.395</td>
<td>No support</td>
</tr>
<tr>
<td>Political interference</td>
<td>Hypothesis 3</td>
<td>0.454</td>
<td>No support</td>
</tr>
<tr>
<td>Monitoring</td>
<td>Hypothesis 4</td>
<td>0.383</td>
<td>No support</td>
</tr>
<tr>
<td>Organizational structure</td>
<td>Hypothesis 5</td>
<td>0.177</td>
<td>No support</td>
</tr>
<tr>
<td>Goals</td>
<td>Hypothesis 6a</td>
<td>0.356</td>
<td>No support</td>
</tr>
<tr>
<td></td>
<td>Hypothesis 6b</td>
<td>0.092</td>
<td>No support</td>
</tr>
<tr>
<td>Financing</td>
<td>Hypothesis 7a</td>
<td>0.088</td>
<td>No support</td>
</tr>
<tr>
<td></td>
<td>Hypothesis 7b</td>
<td>0.126</td>
<td>No support</td>
</tr>
<tr>
<td>Ownership</td>
<td>Hypothesis 8a</td>
<td>0.239</td>
<td>No support</td>
</tr>
<tr>
<td></td>
<td>Hypothesis 8b</td>
<td>0.259</td>
<td>No support</td>
</tr>
<tr>
<td>Organizational control</td>
<td>Hypothesis 9</td>
<td>0.201</td>
<td>No support</td>
</tr>
</tbody>
</table>

Even though none of the hypotheses are significant, it does not mean that they are not interesting to further explore. This will be further discussed in 5.1.7 Correlation matrix testing.

5.1.6 Regression analysis

The section regression analysis aims to create a model that explain which of the independent variables and which of the control variables that influence the accounting choice of municipal corporations.

5.1.6.1 Dependent variable

The dependent variable in this study is as mentioned before the accounting choice of asset value loss. The accounting choice of asset value loss can be directed towards the fair-value
method or the cost-depreciation method. In the regression analysis, the study deters to examine which variables influence the accounting choice of asset value loss.

The choices of asset value loss will the recoded into a dummy variable in order to make the regression possible. The respondents answered on a Likert-scale from 1-7, to what extent they use the fair-value method as well as the cost-depreciation method to value tangible assets. In order to recode the data into a dummy variable the values from the question towards the fair-value method will be subtracted from the values from the question towards the cost-depreciation method. Hence, this produces positive, negative and neutral sums.

The positive sums refer to a higher rate of adopting the cost-depreciation method. Thus, the value presents a greater extent of using the cost-depreciation method. The positive sums (i.e. the cost-depreciation method) will be coded 1. The negative sums refer to the rate of adopting the fair-value method. Thus, the value presents a greater extent of using the fair-value method. The negative sums (i.e. the fair-value method) will be coded 0. The neutral sums refer to the cases in which the rate of adopting the cost-depreciation method and the fair-value method were the same. Thus, the values will be given a missing value since it is not possible to determine which method these municipal corporations use the most. The recoding of the asset value loss into a dummy variable is illustrated in the model below (see table 27).

<table>
<thead>
<tr>
<th>Fair value</th>
<th>Cost-depreciation</th>
<th>Sum</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>5</td>
<td>3 (5-2)</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>-3 (2-5)</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>0 (3-3)</td>
<td>-</td>
</tr>
</tbody>
</table>

5.1.6.2 Independent variables

This study contains 13 different independent variables. The hypotheses testing through correlation proved no significance for either of the hypothesis with an exception for hypothesis 7b. Thus, this could indicate that there are independent variables that influence each other. According to Pallant (2010) this could be further studied through a multi linear regression, furthermore, only the coefficient table with the collinearity statistics were noted. According to Pallant (2010) collinearity statistics produce tolerance- and VIF-values. These values indicate how much the independent variables are correlated with each other. The thumb rule is that a tolerance value below 0,4 and a VIF-value above 2,5 indicate that the
variable should be excluded from the model. In this study none of the independent variables proved any multicollinearity (i.e. high intercorrelations).

Pallant (2010) states that the multicollinearity can also be studied through a correlation matrix. In the correlation matrix the correlation between each of the variables is illustrated. Thus, one can determine if the independent variables correlate with each other. According to Pallant (2010) if the correlation between two independent variables exceed a value of 0.7 you may consider omitting one of the variables. In this study none of the independent variables proved to correlate with each other. Thus, since neither of the correlation matrix or collinearity statistics proved any multicollinearity, none of the independent variables were excluded from the study.

5.1.6.3 Control variables
In the empirical method chapter and furthermore the dependent variable section, the dependent variables of this dissertation were presented. The control variables presented were: Organizational-position, financial outcome, number of employees as well as geographical location. The control variable of organizational position is excluded from the regression since it proved a very low variation in the answers, as 68.9 percent were working as CFO. In addition, the control variable of geographical location is also excluded from the regression, since it also proved a low variation in the answers, where 91.1 percent were located outside of the major cities of Malmo, Stockholm and Gothenburg.

The control variables of financial outcome as well as number of employees could possible influence the accounting choice. Thus a regression containing the two control variables depicted above was conducted in an individual regression. The regression proved significance for financial outcome. Thus the control variable of financial outcome was included in the final regression. The control variable number of employees was excluded, since both the financial outcome and number of employees control the variable of size. Furthermore, only one measure of size is needed in the regression.

5.1.6.4 Regression analysis of the variables
Regression is an extension of correlation and is used to explore the predictive ability of a set of independent variables one fixed dependent variable (Pallant, 2010). Furthermore, this technique allows the researcher to compare the predictive ability of independent variables and thus find the “best set of variables to predict a dependent variable” (ibid., p. 104)
The supported independent variables from the multicollinearity test combined with the supported control variable will be tested in a final regression in order to determine the best set of variables to predict the influence on accounting choice. Since the dependent variable is a dummy-variable the regression was tested through a logistic regression. The logistic regression produces an Omnibus Tests of Model Coefficients. This model determines how well the whole model performs. The significance levels in the Omnibus Tests of Model Coefficients should be below 0.05 in order to support the model as being worthwhile (Pallant, 2010). This study proved no significance; furthermore the significance level was 0.549.

The Omnibus Tests of Model Coefficients also produce a table called Variables in the Equation table. This table determines the importance of each independent variable (Pallant, 2010). According to Pallant (2010) in order to be significant the significance levels needs to be less than 0.05. In this study only the control variable of financial outcome (turnover) proved to be significant. In the table blow the significance values of the variables from the Omnibus Tests of Model Coefficients is illustrated.

Table 28. Omnibus Tests of Model Coefficients

<table>
<thead>
<tr>
<th>Factors</th>
<th>Sig.niv</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal framework</td>
<td></td>
</tr>
<tr>
<td>Municipal Act</td>
<td>0.416</td>
</tr>
<tr>
<td>Swedish Companies Act</td>
<td>0.194</td>
</tr>
<tr>
<td>Market completion</td>
<td>0.448</td>
</tr>
<tr>
<td>Political interference</td>
<td>0.694</td>
</tr>
<tr>
<td>Monitoring</td>
<td>0.318</td>
</tr>
<tr>
<td>Organizational structure</td>
<td>0.226</td>
</tr>
<tr>
<td>Goals</td>
<td></td>
</tr>
<tr>
<td>Public goals</td>
<td>0.537</td>
</tr>
<tr>
<td>Private goals</td>
<td>0.233</td>
</tr>
<tr>
<td>Financing</td>
<td></td>
</tr>
<tr>
<td>Public financing</td>
<td>0.914</td>
</tr>
<tr>
<td>Private financing</td>
<td>0.411</td>
</tr>
<tr>
<td>Ownership</td>
<td></td>
</tr>
<tr>
<td>Public ownership</td>
<td>0.660</td>
</tr>
<tr>
<td>Private ownership</td>
<td>0.993</td>
</tr>
<tr>
<td>Organizational control</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.888</td>
</tr>
<tr>
<td>Turnover</td>
<td>0.025</td>
</tr>
</tbody>
</table>
5.1.7 Correlation matrix testing

According to Pallant (2010) even if the logistic regression proved no significance to any of the independent variables the correlations between two individual variables can be studied through a correlation matrix. The result of this is shown in appendix 3 (Correlation matrix).

In the first correlation matrix, the dependent variable is the categorical variable (i.e. dummy variable) that was created, where 1 refers to cost-depreciation method and 0 refers to the fair-value method. The matrix also includes all of the independent variables as well as the control variable financial outcome (turnover). The matrix shows two things of interest. Firstly, one can read that the turnover is negatively (-0.233) correlated with the dependent variable. In practice, this would mean that the more turnover, the more use of the fair-value method. This is in line with the expectations, because as a corporation gets bigger, it will get more attention from the society and media. That may further mean that the municipal corporation will choose the accounting method that will reduce the information asymmetry between stakeholders and the corporation. However, to criticize the matrix, the correlation is weak (-0.233). Furthermore, it is significant at a p < 0.1 level. Secondly, one can also read that there is a correlation between how municipal feel influenced by the Municipal Act and the accounting choice. The matrix shows a negative correlation of -0.221 which means that the more influenced the municipal corporation feel of the Municipal Act, the more will they tend to choose the fair-value method. This was tested in hypothesis 1a, but there were no significance found. However, the correlation matrix proves a significant correlation between the influence of the Municipal Act and the use of the fair-value method. Nevertheless, the correlation here is also rather weak and is significant at p < 0.1.
6. Conclusion

The conclusion chapter is the final part of the dissertation. The chapter include a summary of the dissertation together with the findings. This is followed by the contributions to the field of study. The chapter ends with a reflection of the findings and suggestions for future research.

6.1. Summary of the dissertation

This study aims at answering the research question what factors of the dual role influence the accounting choice in municipal corporations. Prior research has explained the dual role of municipal corporations and thus how they act in business-like terms as well as a welfare function. This dual role in society is connected to the changes within the management of the municipal corporations, explained as new public management (NPM). This study, derived factors from the dual role in order to examine what factors influences the accounting choice in municipal corporations.

The dependent variable in this dissertation, the accounting choice is a wide term and had to be narrowed down into a specific accounting choice. The prior research used the asset value loss as a parameter for accounting choice, which seemed favourable and thus this dissertation adopted asset value loss as a parameter for accounting choice as well. Furthermore, the parameter of asset value loss is not significant to all corporations, thus it only influence those with tangible assets. Therefore, this dissertation focused on municipal corporations in the real-estate sector.

The prior research and studies of the dual role in municipal corporations led to hypotheses of how municipal corporations make accounting choices. These hypotheses were empirically tested with a quantitative questionnaire. Furthermore, the data from the questionnaire was then statistically tested in order to determine if the hypotheses were significant or not and moreover which of the factors influence the accounting choice.

The statistical analysis proved no significance to the model. According to Pallant (2010) the significance levels in the logistic regression should be below 0,05 in order to support the model as being worthwhile (Pallant, 2010). This study proved no significance; furthermore the significance level was 0,549. The logistic regression only proved significance for the control variable of financial outcome (turnover), none of the variables proved to be statistically significant.
The logistic regression found no significance for the model, hence to study if there were any correlations between any of the variables and the dependent variable a correlations matrix was constructed. This correlation matrix included all the independent variables the control variable of financial outcome and the dependent variable. The matrix shows two things of interest. Firstly, one can read that the turnover is negatively (-0.233) correlated with the dependent variable. In practise, this would mean that the more turnover, the more use of the fair-value method. However, to criticize the matrix, the correlation is weak (-0.233). Furthermore, it is significant at a p < 0.1 level. Secondly, one can also read that there is a correlation between how municipal feel influenced by the Municipal Act and the accounting choice. The matrix shows a negative correlation of -0.221 which means that the more influenced the municipal corporation feel of the Municipal Act, the more will they tend to choose the fair-value method. This was tested in hypothesis 1a, but there were no significance found. However, the correlation matrix proves a significant correlation between the influence of the Municipal Act and the use of the fair-value method. Nevertheless, the correlation here is also rather weak and is significant at p < 0.1.

The logistic regression proved no significance for the model. Thus, the research question cannot be answered, since the analysis proved no significant correlation for the model. Nevertheless, this does not mean that the findings are irrelevant. The correlations found in the correlation matrix are significant and prove that both the Municipal Act and the turnover influence the accounting choice. Furthermore, the lack of significant correlations is a finding as well. Municipal corporations act in a twilight zone having a dual role in society. The missing correlations in the model may be an indication of a lack of consistency in the operations of the municipal corporation, due to their dual role in society.

6.2 Reflections of the findings and non-findings

This section will consider the reflections of the findings as well as the non-findings. Thus, the section will be divided into two subsections: Reflections of the findings and reflections of the non-findings.

6.2.1 Reflections of the findings

This dissertation is inspired by Collin et al. (2009) where they tested accounting choice in Swedish Municipal Corporations. However, that study’s methodical approach was a document study analysis. In this dissertation, a questionnaire was sent out to the municipal corporations in the real-estate field. The correlation matrix showed two significant
correlations at $p < 0.1$. The first finding in the matrix showed that there is a negative
correlation between turnover and the use of the fair-value method. The turnover was used as
a control variable in order to see if the size of the corporations influences the accounting
choice. The finding is, as argued before, expected since it is natural if a corporation gets
bigger it also gets more attention from society and media. Therefore, one could argue that the
municipal corporation in this case wants to be legitimate and accountable, and thus use more
reliable accounting methods such as the fair-value method.

The second finding in the correlation matrix was that there was a correlation between the
Municipal Act and the use of fair-value method. This means that the more regulated the
municipal corporation feel of the Municipal Act, the more do they tend to use fair-value
method. Municipal corporations that are constrained by the Municipal Act operate towards
the welfare systems of the society. Thus, they want to be accountable and transparent to their
ultimate owner (i.e. the citizens). In addition, it is arguable that municipal corporations will
adopt the fair-value method in order to value tangible assets, because it will contribute
to lessen information asymmetries to the society.

6.2.2 Reflections of the non-findings
In this subsection all of the factors that are derived from municipal corporations’ dual role in
society are discussed. Furthermore, the discussion will be directed towards why the factors
proved no significance and what the non-findings might indicate.

The analysis could not find that the factors in a high extent influenced the accounting choice.
The findings were merely correlated as they showed a weak correlation. This might have an
explanation in the choice of dependent variable. The accounting choice of asset value loss
was derived from Quagli and Avallone (2010) and their study of accounting choice in private
corporations. The assumption was that the municipal corporations would adopt the fair-value
method or the cost-depreciation method in a higher extent, but that was not the fact.
Municipal corporations have a combined use of accounting methods when valuating tangible
assets.

The combined use of accounting methods when valuating tangible assets may be a result due
to their dual role in society, as they obtain characteristics from both the private and the public
sector. This may strengthen the findings by Collin et al. (2009) whom found that municipal
corporations should be examined with a combined use of theories. Municipal corporations act
in a twilight zone where they have to act on the private market at the same time they exert a welfare function. This might in turn influence the accounting choice.

The external factors emphasise the influences that the municipal corporations cannot directly affect. The prior research proves differences between private corporations and municipal corporations, due to external influences. Nevertheless, this study cannot prove a significant correlation between the external factors and the accounting choice, only a weak correlation for the Municipal Act at significance level $p < 0.1$. The fact that none of the factors prove a high correlation indicates that one cannot illustrate municipal corporations as a single phenomenon; one municipal corporation is not another alike. The characteristics that the municipal corporations obtain from the private and the public sectors differ from each municipal corporation. Furthermore, this heterogeneous characteristic among municipal corporations could be an indication of the level of publicness in the corporations. That would mean to which extent they obtain characteristics from the private sector respective the public sector.

The level of publicness is related to the decentralizations in governments explained by Argento et al. (2010). The more the governments decentralize the decision power towards various forms of privatizations (e.g. municipal corporations) the more will the level of publicness be reduced and the municipal corporations obtain characteristics from the private sector in a higher extent. Thus, one could argue that the more governments decentralize the decision power the less will the municipal corporations be influenced by the external factors. This is because they tend to adopt characteristics from the private sector, and hence the operations tend to be directed towards profitability and accountability.

The internal factors derived from prior research were: Organizational structure, goals, financing, ownership and organizational control. The internal factors refer to the implementation of new public management (NPM). According to Bergmann (2009) the decentralization of decision power in is connected to NPM and thus new management techniques. These new management techniques are directed to profitability in a less centralised public context (ibid). NPM makes a more efficient function possible, directed towards market competition and cost reduction (Mathiasen, 1999).

The prior research proves differences between private corporations and municipal corporations, due to municipal corporations’ dual role in society. Nevertheless, this study
cannot prove a significant correlation between the internal factors and the accounting choice. This is connected to the result of the study directed to the external factors. The study indicates that one cannot illustrate municipal corporations as a single phenomenon. The study indicates that the factors derived from prior research influence the accounting choice, although in the same way to all municipal corporations. This further strengthens the discussion of a level of publicness among municipal corporations.

6.3 Answer to the research question
The study could not provide a straight answer to the research question ‘What factors of the dual role in municipal corporations influence the accounting choice?’ However, it highlighted questions for future research.

6.4 The dissertation’s contributions to the field of study
In this section the empirical, methodological and theoretical contributions from the study are presented.

6.4.1 Empirical contributions
This dissertation contributes to the research in the field of municipal corporations, which has been less researched than the field of private corporations concerning the accounting choice (Collin et al., 2009). The prior research has traditionally investigated the topic using either institutional pressure-related theories, or through theories explaining opportunistic behaviour (c.f., Carpenter & Feroz, 2001; Zimmerman, 1977; Elbannan and McKinley, 2006). However, other researchers, for instance Collin et al. (2009), suggest that the use of one theory might not be sufficient to explain how municipal corporations make decisions, leading to the need for a more combined use of theories. This dissertation is aligned with the explanation of Collin et al. (2009) and adopts a combined use of stakeholder theory, institutional theory and positive accounting theory. This is a step forward, towards adopting a combined use of theories explaining different phenomenas in the municipal corporation sector.

6.4.2 Methodological contributions
The prior quantitative research concerning accounting choice has to a large extent used secondary data; such as annual reports and data bases (Collin et al., 2009). The problem with these studies is that the research is based on data that might be different from the reality in the corporations. This is because the annual reports and data bases represent the final
decision and disclosure. Hence, this data do not consider the complexities and contradictions that might occur in order to make the disclosures. Moreover, municipal corporations are located in an institutional twilight where they obtain characteristics from both the private and the public sector. Thus, there may be dual separated interests in the municipal corporations, which are not presented in the annual reports or data bases.

By using a questionnaire, the study can collect the scale of which may reflect the dual role in municipal corporations. This dual role is difficult to examine and to analyse using a document study, since it does not consider the individual opinions. According to Collin et al. (2009), the information distributed in the annual reports does not necessarily reflect the actual picture. Hence, conflicts and disagreements in the corporations often will be left aside. Thus, this study contributes to the methodological studies in the field of municipal corporations’ accounting choice.

6.4.3 Theoretical contributions

The dual role of municipal corporations is a highlighted area both in the media as well in the research field. Nevertheless, a dual role is not unique to municipal corporations. There are a lot of other organizations and departments within organizations that are acting in a twilight zone, thus facing a dual role. Thus, the studies and theories directed towards the field of municipal corporations can be adopted in other areas as well. This could for instance be sport organizations that have incentives to both be profitable as well as acting towards non-profitable goals. It could also be specific professions such as auditors or lawyers that are supposed to act unbiased and objectively, although they have incentives to act opportunistically at the same time. Thus the theories from this research should contribute to the future research concerning dual roles.

The prior research has identified the dual roles of municipal corporations, although there is not much research that examines how this dual role influences the operations of the municipal corporations. This study contributes to how this dual role influences the operations of the municipal corporations. Furthermore, what factors influence the accounting choice in municipal corporations. Thus, this dissertation contributes theoretically to the field of study.

6.5 Limitations and self-criticism

The aim of the study is to examine what factors of municipal corporations’ dual role influence the accounting choice. However, there are some limitations to consider.
Firstly, the sample of this dissertation does not contain every municipal corporation in Sweden. Instead, our sample consists of the municipal real-estate corporations in Sweden. This makes it hard to generalize outside the studied population. Although, the sample was chosen because the municipal corporations’ balance sheets consisted of a high degree of tangible assets.

Secondly, it would be a much more reliable study if there were some other research methods used. Then the study could have benefited from triangulation, which enhances the validity of the results (Denscombe, 2009). For instance, the dissertation could have included interviews in order to understand the phenomena more deeply. However, due to time limitations and practical reasons, the interviews were not an option.

Thirdly, the study contains many factors (i.e. independent variables) that influence the accounting choice. This is arguably both positive and negative. On one hand, it gives a good overview of which factors that might influence the accounting choice. But on the other hand, the study does not examine the factors thoroughly in order to really understand them.

Fourthly, there are only one or sometimes two questions that are linked to each factor. If the study would contain more questions this would perhaps give a more reliable quantitative analysis. In addition, the analysis study also could have consisted of an alpha-test to see if they measured the same variable. Although, more questions would have given more burdens to the recipients, which then may have rushed through the questions. However, there is no way of knowing if the recipients answered truthfully or rushed through the questions, but they may have felt more comfortable in answering since their answers were handled confidentially.

Finally, the dependent variable accounting choice is only considering the asset value loss (i.e. fair-value and cost-depreciation method), and thus, does not give a holistic picture of the research field. This is also a limitation to the study, but is an active choice because the field of accounting choice is comprehensive. If the study was to consider the whole field, the time frame would have to be considerably longer.

6.6 Ethical contribution
Municipal corporations are supposed to operate with the primary aim towards the welfare systems of the society. This study proves that municipal corporations are complex and that one can not illustrate municipal corporations as one phenomenon. Municipal corporations
obtain characteristics from both the private and the public sector, thus they are more or less public, which can be explained through a level of publicness. Due to the different level of publicness one can say that this dissertation contributes in mention of ethical aspects as the primary focus of a welfare function is questioned.

6.7 Future research
Prior research, for instance Peda (2013), Collin et al. (2009) and Holmberg (2010) discuss the dual role of municipal corporations and how they act within a twilight zone, having multiple agendas. Thus, they obtain characteristics from both the private and the public sector. Furthermore, according to Hood (1995) the decentralization of governments through various forms of privatizations (e.g. municipal corporations) is connected to New Public Management (NPM). The NPM changed the management techniques, leading to corporations with a profitable aim in a less centralised context (ibid). According to Collin et al. (2009) this should presumably influence the operations and thus the accounting choice. Nevertheless, this study proved no strong significance for either of the factors derived from the prior research considering the municipal corporations’ dual role in society. This result opens a lot of further questions to study; in this section the authors’ thoughts and ideas to further research opportunities will be presented.

This study was constructed with a quantitative cross-sectional design using a survey in the form of a questionnaire to collect data. The nine independent variables were derived from the municipal corporations’ dual role in society. The dual role of municipal corporations is complex to conceptualize hence a broad base of variables was needed to emphasise all the aspects of the dual role. This makes the study very broad, complex and less concentrated. Furthermore, if the study’s time frame is longer, one could consider doing interviews instead of questionnaires, or maybe even both. This would give the study a high degree of validity and would contain a richer analysis.

This study adopted the asset value loss as a parameter for accounting choice. Thus, the asset value loss was the dependent variable of this dissertation. The authors’ assumptions, based on prior research by Quagli and Avallone (2010), was that the factors of the dual role should presumably influence the choice. Hence, influence the accounting choice to either the fair-value method or the cost-depreciation method in order to value tangible assets. Nevertheless, this was not the case in this study. Municipal corporations tend to adopt both the fair-value method and the cost-depreciation method simultaneously. This indicates that municipal
corporations act in a twilight area, as they want to lessen the agency costs adopting the less volatile accounting method of cost-depreciation. In addition, they want to be transparent and accountable to the society and therefore adopt the credible and trustworthy accounting method of fair-value.

This hybrid accounting choice (i.e. simultaneous use of both the cost-depreciation method and the fair-value method) awake interests to further studies.

Is this hybrid accounting choice specific to asset value loss? Studies adopting other parameters of accounting choice would be of interest, to examine whether the hybridity exceeds the borders of asset value loss. An interesting parameter of accounting choice would be to investigate whether municipal corporations follow IFRS or the K3 directives. The K3 directives include the implementation of component depreciation, which will change the valuation processes of tangible assets to a great extent. The component depreciation is introduced in the fiscal year of 2014 and will force all big corporations (by the classification by K3) to declare a component depreciation. This will result in new routines, procedures and more detailed component registers.

As mentioned before, this study derived factors of the dual role from prior research. Although, the prior research did not include specific factors of the dual role in municipal corporations and proved a lack of coherent conceptualizations of the dual role. Nevertheless, this dissertation could not prove any strong significance to any of the factors influence on accounting choice that was derived from prior research. Therefore, research in order to explain the dual role of municipal corporations more deeply would be interesting. A suggestion for future research would be to concentrate on fewer factors in order to thoroughly understand them.

One could also explore the significant findings in this dissertation in a deeper way. This dissertation found significant correlations (even though they were low) between the regulation of the Municipal Act and the use of the fair-value method as well as between the turnover and the use of fair-value method. Turnover was used as a control variable for size, thus this dissertation proved a correlation between size and the use of fair-value method. This could be interesting to further research. The larger a corporation gets the more likely it is that they obtain reliable accounting methods. This is interesting since the size may be connected to more external pressures from the society. These indications strengthen the idea that
municipal corporations cannot be seen as a single phenomenon, since they are more or less public in nature (i.e. level of publicness). Therefore, more studies that examine how the size of municipal corporations influences their operations and management is of interest.

The Municipal Act constrains the municipal corporations to make profit. Therefore, one could imagine that this research area might be of interest since it considers one of the complexities of being municipally owned. This might encourage new research approaches in order to fully explain how legislations influence accounting choice. This dissertation found that the more the municipal corporations are influenced by the Municipal Act, the more likely they obtain the fair-value method. This may indicate that municipal corporations which are highly influenced by the municipal act feel external pressures to be accountable and transparent. It would be interesting to further examine the Municipal Act’s influence on municipal corporations and why some are more influenced than others.

6.8 Concluding comments

The aim of the study is to examine what factors of municipal corporations dual role that influence the accounting choice. Now after the study with the empirical result in front of us, we ask ourselves, does the dual role of municipal corporations exist after all? This dissertation proved no high significance for any of the factors of municipal corporations’ dual role that have influence on the specific accounting choice of asset value loss. Thus, this dissertation cannot prove that municipal corporations are anything different from other privately owned corporations (at least not on a significant level).

However, as stated before, this may be because municipal corporations cannot be considered a single phenomenon (i.e. no municipal corporation is similar to another). Hence, different municipal corporations are influenced in various extents by different factors of the dual role. This is because they may be more or less public in character (level of publicness). In addition, this dissertation was directed towards the specific accounting choice of asset value loss. There might be other parameters within the accounting choice that proves significance for the factors of municipal corporations’ dual role in society. Taken this into consideration, this may be a reason why the analysis found so little. The authors of this dissertation hope that this conducted research will inspire others to further examine the accounting choice in municipal corporations.
References


Appendix 1. Questionnaire in Swedish

Hej!

Vi är två studenter som studerar ekonomi vid Högskolan Kristianstad.

Vi skriver just nu en kandidatuppsats där syftet är att undersöka vilka faktorer som påverkar redovisningsval i kommunala bolag. Enkäten inkluderar främst olika påståenden som vi önskar att du besvarar. Enkäten är riktad i första hand till ekonomichefen på företaget. I annat fall går det bra om VD eller personal på ekonomiavdelningen utför enkäten.

Vi skulle vara mycket tacksamma om du har möjlighet att besvara enkäten som beräknas ta cirka fem minuter. Era uppgifter behandlas konfidentiellt och anonymt.

Tack på förhand för din medverkan! Dina svar är viktiga för vårt kandidatarbete.

Med vänliga hälsningar

Dennis Tran och Olle Schultz

Vid frågor är ni välkomna att kontakta oss på antingen mail eller via telefon.

dennistran@live.se  olleschultz@hotmail.com

0708-356851  0703-812684

1. Vänligen ange din roll i företaget:

- VD
- Ekonomichef
- Jobbar på ekonomiavdelningen
- Annat

2. Jag är:

- Man
- Kvinna

3. Var är ert företag beläget?

- Malmö
- Göteborg
- Stockholm
- Annat
4. Ange antal anställda i företaget i siffror

5. Vilken omsättning hade er organization under år 2013? Ange belopp i siffror och svenska kronor.

6. I vilken utsträckning använder er organisation marknadsvärde för att ta hänsyn till värdeminskning av materiella tillgångar? (1 = låg utsträckning, 7 = hög utsträckning).

   1  2  3  4  5  6  7
   □  □  □  □  □  □  □

7. I vilken utsträckning använder er organisation anskaffningsvärde för att ta hänsyn till värdeminskning av materiella tillgångar? (1 = låg utsträckning, 7 = hög utsträckning).

   1  2  3  4  5  6  7
   □  □  □  □  □  □  □

8. I vilken utsträckning anser du att er organisation är styrd av Aktiebolagslagen? (1 = låg utsträckning, 7 = hög utsträckning).

   1  2  3  4  5  6  7
   □  □  □  □  □  □  □


   1  2  3  4  5  6  7
   □  □  □  □  □  □  □

10. I vilken utsträckning anser du att er organisation påverkas av marknadskonkurrens? (1 = låg utsträckning, 7 = hög utsträckning).

    1  2  3  4  5  6  7
    □  □  □  □  □  □  □

11. I vilken utsträckning anser du att er organisation påverkas av politiskt inflytande från kommunen? (1 = låg utsträckning, 7 = hög utsträckning).

    1  2  3  4  5  6  7
    □  □  □  □  □  □  □

12. I vilken utsträckning anser du att organisationens medarbetare får vara involverade i organisationens beslutsfattningsprocesser? (1 = låg utsträckning, 7 = hög utsträckning).

    1  2  3  4  5  6  7
    □  □  □  □  □  □  □
13. I vilken utsträckning anser du att er organisation är utsatt för granskning från allmänheten? (1 = låg utsträckning, 7 = hög utsträckning).

1
2
3
4
5
6
7


1
2
3
4
5
6
7

15. I vilken utsträckning anser du att målen i er organisation är inriktade mot samhällsnytta? (1 = låg utsträckning, 7 = hög utsträckning).

1
2
3
4
5
6
7


1
2
3
4
5
6
7

17. I vilken utsträckning anser du att er organisation får sina inkomster från den privata sektorn? (1 = låg utsträckning, 7 = hög utsträckning).

1
2
3
4
5
6
7

18. I vilken utsträckning anser du att er organisation är ägd av den offentliga sektorn? (1 = låg utsträckning, 7 = hög utsträckning).

1
2
3
4
5
6
7

19. I vilken utsträckning anser du att er organisation är ägd av den privata sektorn? (1 = låg utsträckning, 7 = hög utsträckning).

1
2
3
4
5
6
7

20. I vilken utsträckning anser du att er organisation är styrd av regler och direktiv? (1 = låg utsträckning, 7 = hög utsträckning).

1
2
3
4
5
6
7
Appendix 2. Questionnaire in English

Hi!

We are two business students at Högskolan Kristianstad.

This survey is a part of our bachelor dissertation, where the aim of the study is to examine what factors of municipal corporations dual role that influence the accounting choice. The survey is directed towards the CFO, but if the CFO is not available the CEO or anyone on the business department can answer the survey as well.

We would be very thankful if you have the time and possibility to answer the survey, which is calculated to take not more than five minutes. All information provided will be treated confidentially.

Thank you for your participation! Your answers are important to our dissertation.

Kind regards,

Dennis Tran och Olle Schultz

You are welcome to contact us if there are any questions.

dennistran@live.se               olleschultz@hotmail.com

0708-356851                   0703-812684

1. What is my organizational role in the corporation?
   - CEO
   - CFO
   - Working at the business department
   - Other

2. I am
   - Man
   - Woman
3. Where is the geographical location of the municipal corporation?

- Malmö
- Gothenburg
- Stockholm
- Other

4. How many employees does the municipal corporation have?

5. What was the turnover in the fiscal year of 2013?

6. To what extent does the municipal corporation use the fair-value method to value the tangible assets? (1 = low extent, 7 = high extent).

7. To what extent does the municipal corporation use the fair-value method to value the tangible assets? (1 = low extent, 7 = high extent).

8. To what extent do you feel that your organization is governed by the Swedish Companies Act? (1 = low extent, 7 = high extent).

9. To what extent do you feel that your organization is governed by the Municipal Act? (1 = low extent, 7 = high extent).

10. To what extent do you feel that your organization is influenced by market competition? (1 = low extent, 7 = high extent).
11. To what extent do you feel that your organization is influenced by political interference from the municipality? (1 = low extent, 7 = high extent).

```
1 2 3 4 5 6 7
☐ ☐ ☐ ☐ ☐ ☐ ☐
```

12. To what extent do you feel that you are involved in decision making processes? (1 = low extent, 7 = high extent).

```
1 2 3 4 5 6 7
☐ ☐ ☐ ☐ ☐ ☐ ☐
```

13. To what extent do you feel that the municipal corporation is exposed to monitoring from the society? (1 = low extent, 7 = high extent).

```
1 2 3 4 5 6 7
☐ ☐ ☐ ☐ ☐ ☐ ☐
```

14. To what extent do you feel that the goals of the municipal corporation are directed towards profitability? (1 = low extent, 7 = high extent).

```
1 2 3 4 5 6 7
☐ ☐ ☐ ☐ ☐ ☐ ☐
```

15. To what extent do you feel that the goals of the municipal corporation are directed towards the welfare systems of the society? (1 = low extent, 7 = high extent).

```
1 2 3 4 5 6 7
☐ ☐ ☐ ☐ ☐ ☐ ☐
```

16. To what extent do you feel that the municipal corporation is financed by the public sector? (1 = low extent, 7 = high extent).

```
1 2 3 4 5 6 7
☐ ☐ ☐ ☐ ☐ ☐ ☐
```

17. To what extent do you feel that the municipal corporation is financed by the private sector? (1 = low extent, 7 = high extent).

```
1 2 3 4 5 6 7
☐ ☐ ☐ ☐ ☐ ☐ ☐
```

18. To what extent do you feel that the municipal corporation is owned by the public sector? (1 = low extent, 7 = high extent).

```
1 2 3 4 5 6 7
☐ ☐ ☐ ☐ ☐ ☐ ☐
```
19. To what extent do you feel that the municipal corporation is owned by the private sector? (1 = low extent, 7 = high extent).

20. To what extent do you feel that the organizational climate is open and support individual initiatives? (1 = low extent, 7 = high extent).
Appendix 3. Correlation matrix

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Accounting choice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Financial outcome</td>
<td>-0.233†</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Swedish companies act</td>
<td>-0.065</td>
<td>0.098</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Municipal act</td>
<td>-0.221†</td>
<td>-0.062</td>
<td>0.268*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Market competition</td>
<td>-0.124</td>
<td>0.172</td>
<td>0.220*</td>
<td>0.162</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Political interference</td>
<td>-0.137</td>
<td>-0.002</td>
<td>0.337**</td>
<td>0.378**</td>
<td>0.077</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Organizational structure</td>
<td>0.037</td>
<td>0.086</td>
<td>0.031</td>
<td>0.014</td>
<td>0.297**</td>
<td>-0.074</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Monitoring</td>
<td>-0.067</td>
<td>0.281**</td>
<td>0.205</td>
<td>0.306**</td>
<td>0.185</td>
<td>0.460**</td>
<td>-0.059</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Profitability</td>
<td>0.009</td>
<td>0.169</td>
<td>0.325**</td>
<td>0.014</td>
<td>0.221*</td>
<td>0.036</td>
<td>-0.005</td>
<td>0.119</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Welfare function</td>
<td>-0.137</td>
<td>-0.006</td>
<td>0.274**</td>
<td>0.330**</td>
<td>0.117</td>
<td>0.323**</td>
<td>0.059</td>
<td>0.406**</td>
<td>0.101</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Private sector financing</td>
<td>-0.046</td>
<td>-0.176</td>
<td>-0.035</td>
<td>0.266*</td>
<td>0.113</td>
<td>0.175</td>
<td>0.032</td>
<td>0.014</td>
<td>0.086</td>
<td>0.228*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Public sector ownership</td>
<td>0.126</td>
<td>0.202</td>
<td>0.028</td>
<td>-0.261*</td>
<td>-0.021</td>
<td>-0.272**</td>
<td>-0.017</td>
<td>-0.052</td>
<td>0.016</td>
<td>-0.226*</td>
<td>-0.545*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 Private sector ownership</td>
<td>-0.070</td>
<td>-0.075</td>
<td>0.574**</td>
<td>0.211*</td>
<td>0.057</td>
<td>0.399**</td>
<td>0.105</td>
<td>0.144</td>
<td>0.259*</td>
<td>0.017</td>
<td>0.054</td>
<td>0.062</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 Public sector ownership</td>
<td>0.073</td>
<td>0.132</td>
<td>-0.260**</td>
<td>-0.190</td>
<td>-0.092</td>
<td>-0.245*</td>
<td>-0.037</td>
<td>0.039</td>
<td>-0.094</td>
<td>-0.035</td>
<td>-0.095</td>
<td>0.102</td>
<td>-0.614*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 Organizational control</td>
<td>0.013</td>
<td>0.051</td>
<td>0.079</td>
<td>0.033</td>
<td>-0.046</td>
<td>0.024</td>
<td>0.057</td>
<td>0.054</td>
<td>0.251*</td>
<td>0.248*</td>
<td>0.120</td>
<td>0.054</td>
<td>-0.071</td>
<td>-0.050</td>
<td></td>
</tr>
</tbody>
</table>

* p < 0.01
** p < 0.05
† p < 0.1