

# **COMPONENT DEPRECIATION IN SWEDISH REAL ESTATE COMPANIES**

# A study of how private and municipal companies handle K3's new requirement for component depreciation

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# Abstract

**Background and problem discussion:** From the 1<sup>st</sup> of January 2014, the K3 framework developed by the Swedish Board for Accounting Standards became mandatory for large Swedish companies. K3 contains a requirement for tangible assets to be divided into components if the difference in consumption of the components was likely to be significant. Also, additional costs are activated in the balance sheet if they fulfill the general asset criteria. Since real estate companies have large populations of tangible assets, they are affected by the new requirement. The K3 framework is principle-based and do not have specific guidance regarding which components should be accounted for and how additional costs should be treated. Instead, accounting professionals urged industry organizations to develop guidelines the companies could use. The way assessments are made and how the framework is interpreted can also be connected to the accounting motives within the organization. Private and municipal real estate companies are different in their ownership structures and can therefore make different assessments and alternatives for actions.

**Purpose:** The thesis has explored how municipal and private companies handled the requirement for component accounting in practice, and how their choices are affected by institutional forces such as guidance from industry organizations as well as accounting motives emerging from their ownership structures.

**Methodology:** The thesis has been based on a qualitative method where in-depth interviews have been made with CFOs in municipal and private real estate companies. By applying existing knowledge in the field on the empirics a deductive approach has been used.

Analysis and conclusion: The study has showed that all companies have used guidance from industry organizations to prepare their component accounting, but that the municipal companies would have appreciated more specific guidance. The auditors have played a minor role in the implementation, but they had a principle-based approach in their advising. The thesis has also concluded that municipal companies made more detailed component plans than private companies and that they thought the new framework provided a more true and fair view for the users of their financial reports. The private companies strived to simplify the division of components as much as possible to reduce costs and to put resources on actions that maximized the company value in order to satisfy the owners, consistent with PAT. A potential agency problem has been identified in the relatively small municipal companies since the municipal board did not evaluate their earnings targets very thoroughly.

**Contribution:** The study contributes with an overall description of the handling of component depreciation, and that companies address the new demand differently, depending on ownership structure and size of business. It also provides a feedback to the standard setter in terms of deficiencies such as insufficient initial guidance, insufficient knowledge from auditors and decreased comparability in the early stage.

**Keywords**: K3, component depreciation, real estate, municipal company, private company, institutional forces, accounting motives.

# Abbreviations

BFN	- Swedish Accounting Standards Board
BFNAR	- Common Advices from the Swedish Accounting Standards
	Board
IFRS	- International Financial Reporting Standards
K2	- The category 2 accounting framework for small Swedish
	companies, applicable from January 2014
K3	- The category 3 accounting framework for large Swedish
	companies, applicable from January 2014
IFRS for SMEs	- IFRS for small and medium-sized entities
SABO	- The Swedish Association of Public Housing Companies
FAR	- The Swedish industry organization for accounting consultant
PAT	- Positive Accounting Theory
ÅRL	- Annual Accounts Act

# Table of contents

Acknowledgements	2
Abstract	3
Abbreviations	4
Table of contents	5
1. Introduction	
1.1 Background	
1.1.1 The development of accounting in Sweden	
1.1.2 The K project and the accounting for tangible assets	
1.1.3 Private and municipal companies - two types of ownership structures	8
1.2 Problem discussion	
1.3 Purpose	10
1.4 Research question	10
1.5 Scope	10
1.6 Disposition	
1.7 Definitions of terms	10
2. Frame of reference	12
2.1 Differences between private and municipal real estate companies	
2.2 Depreciation of buildings before K3	
2.3 K3, a principle-based framework	
2.5 KS, a principle-based if allework	
2.5 Advantages and disadvantages with component accounting	
2.6 Institutional forces	
2.6.1 Specific guidelines for K3 from industry organizations and experts	
2.7.1 Positive Accounting Theory 2.8 Summary of the frame of reference	
-	
3. Methodology	21
3.1 Disposition of the study	21
3.2 Course of action	21
3.3 Research approach	21
3.4 Research strategy	22
3.5 Interviews	22
3.5.1 Design of interview questions	22
3.5.2 The selection of respondents	23
3.5.3 Presentation of respondents	23
3.6 Processing the information	24
3.7 Methodological problems	25
3.8 The quality of the study	25
3.8.1 Reliability	
3.8.2 Validity	
3.8.3 Source criticism	25
3.9 Analysis model	26
4. Empirical findings	27
4.1 Practical handling of component depreciation	
4.1.1 Division of components and handling of maintenance in municipal real e	
companies	
4.1.2 Division of components and handling of maintenance in private real esta	
companies	
r	

4.1.3 Managing facility registers in municipal and private real estate companies	
4.1.4 Advantages and disadvantages with component depreciation for municipation for municip	
real estate companies	
4.1.5 Advantages and disadvantages with component depreciation for private r	
estate companies	31
4.2 The impact of institutional forces	
4.2.1 Municipal real estate companies	
4.2.2 Private real estate companies	
4.3 Motives for accounting choices	
4.3.1 Municipal real estate companies 4.3.2 Private real estate companies	
4.3.3 Companies choosing between K2 and K3	
5. Analysis	
5.1 How do companies' accountants make choices for component depreciati	on?
	37
5.2 Which impact do industry organizations, auditors and expert guidance's	
have on the component accounting?	
5.3 How are the accounting choices shaped by the ownership structure?	40
6. Conclusion	43
6. Conclusion 6.1 Results of the research question	
	43
6.1 Results of the research question	<b> 43</b> n?
<b>6.1 Results of the research question</b>	<b> 43</b> n?
<b>6.1 Results of the research question</b>	<b>43</b> n? 43
<ul> <li>6.1 Results of the research question</li></ul>	<b>43</b> n? 43 43 44
<ul> <li>6.1 Results of the research question</li></ul>	43 n? 43 43 44 45
<ul> <li>6.1 Results of the research question</li></ul>	<b>43</b> n? 43 43 44 <b>45</b> <b>45</b>
<ul> <li>6.1 Results of the research question</li></ul>	<b>43</b> n? 43 43 44 <b>45</b> <b>45</b>
<ul> <li>6.1 Results of the research question</li></ul>	43 n? 43 43 43 45 45 45
<ul> <li>6.1 Results of the research question</li></ul>	43 n? 43 43 44 45 45 45 46
<ul> <li>6.1 Results of the research question</li></ul>	43 n? 43 43 44 45 45 45 46 46
<ul> <li>6.1 Results of the research question</li></ul>	43 n? 43 43 44 45 45 45 46 46
<ul> <li>6.1 Results of the research question</li></ul>	43 n? 43 43 44 45 45 45 45 46 46 49
<ul> <li>6.1 Results of the research question</li></ul>	43 n? 43 43 44 45 45 45 45 46 46 49 50
<ul> <li>6.1 Results of the research question</li></ul>	43 n? 43 43 44 45 45 45 45 46 46 49 50 50

# **1. Introduction**

The background gives an overall review of the fundamental reasons for developing the K3 framework and why real estate companies are largely affected. The problem discussion elaborates on how companies will apply the new framework and it is discussed how they are affected by institutional forces and accounting motives. Finally, the aim of the essay, the research question, disposition and definitions of terms are presented.

# 1.1 Background

# 1.1.1 The development of accounting in Sweden

The role of accounting is to provide decision-makers with relevant financial information. In Sweden, it must be prepared in accordance with good accounting practice (ÅRL 2:2). Good accounting practice consists of laws and accounting standards, where the standards complement the laws to provide uniform accounting rules. In situations where accounting problems cannot be solved with laws and standards, solutions should be sought in common practice and in guidance from experts, such as industry organizations and auditors (Smith 2006; Marton et al 2013). When Sweden entered the EU, the accounting was adapted to European standards, where a market-oriented accounting was dominant. This led to the introduction of a true and fair view in ÅRL, which meant that the financial reports should be prepared as one entity and provide a true and fair view of the company's financial position and earnings (ÅRL 2:3; Smith 2006; Grönlund et al 2005).

BFN is responsible for developing good accounting practice and producing accounting standards. Initially, they based their guidance on recommendations from the Swedish Financial Accounting Standards Council, which later on they adapted to fit non-listed companies. In February 2004, they decided to change the focus of developing standards due to the possibility for non-listed companies to choose from several accounting rules. Their possibilities to reach desired earnings had become too large, and it was a threat for a true and fair view of the accounting. Another consequence was that the information presented by non-listed companies became very hard to interpret (BFN 2013; Deloitte 2012; EY 2013).

# 1.1.2 The K project and the accounting for tangible assets

With this criticism in mind, a new set of frameworks was produced to make accounting more flexible depending on the size of the company and the type of business. The K-project resulted in a comprehensive framework for annual financial statements and annual reports in non-listed Swedish companies. It consisted of four frameworks aimed for different categories of companies called K1-K4 (BFN, 2013). All companies had to comply entirely with the chosen framework, or the framework they had been forced to follow. By developing four categories of comprehensive frameworks, it was possible to make a clear difference of different categories of accounting entities depending on the primary user of the financial information (BFN, 2013).

The framework relevant for the study is mainly K3, but also K2 to some extent. K2 is optional to apply instead of K3 for companies classified as small in ÅRL. It is a rulebased framework with simple accounting solutions and standard rules with clear limitations and less room for options. K3 is the main regulatory framework in the K project, and it must be applied for companies categorized as large in ÅRL that are non-listed and thereby not using IFRS. The K3 framework is basically consistent with IFRS for SMEs, with some exceptions due to Swedish legislation, such as tax laws, current standards and accounting practice (Marton et al 2013, Grönlund et al 2005).

In K3, tangible assets must be divided into components if the difference in consumption is essential and the component is considered as significant. Retroactive application is not allowed according to the transition rule. This means that properties' accounted value cannot be adjusted to the value they should have had if component depreciation had been used from the start. Previously, tangible assets were depreciated linearly on the whole asset, and component accounting was only encouraged and not mandatory. The reason for implementing the component depreciation method from BFNs side was for the accounting to better reflect the economic substance of the company, make it more user-friendly and increase the comparability (SABO 2012, Hellman et al 2011, Holmström 2003).

The K3 framework will have a great impact on real estate companies. Since they have large possessions of tangible assets, they have always been affected by theories developed for depreciation in choosing the proper method to apply (Stark, 94). The depreciation of tangible assets in the real estate business can be due to three fundamental reasons: deterioration, obsolescence, and market impact. It is possible to offset the impact of deterioration and obsolescence by maintenance work, reinvestments and other types of investments if this is economically motivated and feasible. The market impact, on the other hand, is related to external factors such as an unattractive location that can be hard to counteract (Nordlund 2010).

# **1.1.3 Private and municipal companies - two types of ownership structures**

In Sweden, municipal and private companies are two large operators in the real estate market. During the last decades, the accounting in the public sector has moved closer to the private sector, since depreciations have received more attention. It has become increasingly important for municipalities to have a reasonable solidity, and also to avoid deficits in the annual report. Thus, the valuation of assets in the balance sheet, and how they are depreciated has become a central issue (Lind & Hellström, 2011). Private companies are driven on a profit maximizing purpose, using the profit to finance business operations and distribute dividend. Municipally owned companies, on the other hand, have a commercial purpose but also a responsibility to supply for the housing in the municipality and offer the tenants a possibility to affect their living. From 2011, municipal companies must be driven on a business basis, but they are more regulated than private companies, for instance in the amount of value transfers which they can make during a fiscal year (Boverket, 2011).

# **1.2 Problem discussion**

The practical handling of component depreciation can be divided into two separate issues. The first one is to decide what a substantial component is, and which depreciation period should be used for each component. K3 is designed to prevent the previously long depreciation periods for properties, which sometimes could be up to 100 years when they were depreciated as a whole entity. With K3, tangible assets must be divided into components if there is an expected difference between the components' consumption. The depreciation period of each component should then be based on the estimation of their respective consumption period (Lundström & Nordlund 2012; Lind & Hellström 2011). The component method is considered to

better reflect the asset's economical reality as it considers that different parts of the property have different periods of consumption (Starova & Cermakova, 2010).

The second issue is which costs should be regarded as maintenance and deducted as an expense directly, and which should be regarded as an investment or reinvestment and activated in the balance sheet. The previous performance increasing approach implied that actions restoring the original standard should be seen as maintenance, and only when the standard was improved, it should be activated as an investment. Studies have shown that with this approach, there was large room for tactical considerations by using costs as an earnings regulator. With K3, actions that fulfill the asset criteria and replacements of components need to be activated (Lind & Bejrum 2002; Lundström & Nordlund 2012). It has been argued by accounting professionals that the combined effect of activating a replacement of component and then depreciating it leads to a better accounting than the previously used performance increasing method (Hellman et al, 2011).

Since the K3 framework is principle-based, there are no specific guidelines for activating costs or determining using periods, thus it is up to each company to make own assessments (Fastighetsägarna & SABO, 2012). Previous studies have shown that company managers do not choose one isolated method for their accounting choices, and that they are probably affected by both external and internal forces (Zmijewski and Hagerman, 1981; Watts and Zimmerman, 1990; Fields et al 2001).

Accounting professionals have emphasized that industry organizations should play an important role in developing common practices (Hellman et al, 2011). The transition to a principle-based framework might also lead to increased demands on accountants and auditors, putting more responsibility on the auditors to assess a large spectrum of accounting standards (Carmona & Trombetta 2008; Healy & Palepu 2001). Maines et al (2003); Burgemeestre et al (2009); EFRAG (2005) conclude it is important that accountants are equipped with guidance related to a transition to a principle-based framework. Due to the lack of guidance in the K3 framework regarding component depreciation, it is relevant to explore how these institutional forces affect the accounting in private and municipal real estate companies, and how the accountants deal with the changes of the new framework. There can be differences in how private and municipal companies seek guidance, if they think the guidance is sufficient and in how they develop policies for principle-based standards.

The way assessments are made and how the framework is interpreted can also be closely connected to the accounting motives within the organization. Since K3 is principle-based and provides different alternatives for actions, there is a risk for managers to act opportunistically (Watts & Zimmerman 1978, 1986, 1990). Private and municipal real estate companies are different in their ownership structures and can therefore make different assessments. Private companies have a profit-maximizing purpose while municipal companies must follow the concept of business principles regulated in municipal law. The ownership structure and size of the company can also lead to different degrees of monitoring from the owners. This, together with their engagement in the operations, might affect the work with component depreciation and the demands for how financial reports are prepared (Nilsson 2002; Jensen & Meckling 1976). With these factors in mind, it is relevant to explore how accountants' choices for component depreciation are affected by

different accounting motives, and if there are differences between private and municipal companies.

# **1.3 Purpose**

The purpose of the thesis is to explore how companies make their choices of accounting practice in the context of regulatory framework change. In particular, we aim to explore how municipal and private real estate companies handle the new requirement for component depreciation in K3.

# **1.4 Research question**

How do private and municipal real estate companies handle the requirement for component depreciation in practice?

To answer the main research question the following sub-questions have been set out:

- How do companies' accountants make choices for component depreciation?

- What impacts do industry organizations, auditors and expert guidance's have on the accounting choices?

- How are the accounting choices shaped by the ownership structure?

# 1.5 Scope

The thesis is limited to the focus on non-listed Swedish real estate companies and on how they account for component depreciation according to K3. The changes have been explored from a company perspective, limited to municipal and private real estate companies where the primary business is renting and maintaining properties.

# **1.6 Disposition**

The introduction gives a first glance at the problem found, which is substantiated in the sections background and problem discussion. In the frame of reference, relevant theories and previous research are discussed to apply on the empirics. The methodology describes how the thesis is conducted, its approach and potential problems. The empirics consist of interviews with CFOs of real estate companies based on the research questions of the study. In the analysis section, the theories are applied on the empirics to provide an understanding of how the different perspectives affect the practical handling of component depreciation. Finally, conclusions are made, the findings are highlighted, and suggestions for further research in the area are suggested.

# **1.7 Definitions of terms**

**Major company and consolidation:** To be classified as a major company, more than one of the following prerequisites must have been fulfilled during the past two years, otherwise the company will be classified as small. For each of the past two financial years, the average number of employees in the company amounts to more than 50. For each of the two financial years, the reported total assets in the company amount to more than 40 million SEK. For each of the two financial years, the reported net sales in the company amount to more than 80 million SEK. Major consolidations are consolidations that meet the above conditions (ÅRL 1:3).

**The general assets criteria:** For an asset to comply with the "general assets criteria" the following three paragraphs must be fulfilled: controlling influence as a result of past events, an assumption that it will generate future economic benefits and that the assets' costs can be calculated reliably (BFNAR 2012:1, p. 2:12).

**Depreciation:** The Annual Accounts Act 4:4 states that companies should depreciate tangible assets systematically during their using period. Depreciation is defined in K3 17.12 as "a systematic periodization of an assets depreciable amount over its using period". A tangible asset that is expected to generate benefits over time should be depreciated during the time the benefit is given, according to the matching principle. Depreciation allocates the asset acquisition cost over its usage period, in order to match the expense with the economic benefits the company will receive from the asset during its usage period. Only assets with finite lives are depreciated, wheras land is considered as an asset that will not lose its value and shall therefore not be depreciated (Nordlund 2010, Holmström, 2003).

**Using period:** The using period of an asset is the basis for calculating its depreciation and the time period for expected use. Using period is defined in K3 17:16 as: a) the period over which an asset is expected to be available for use by a company, or b) the number of units produced, or equivalent, which is expected to be obtained from the asset by a company.

**Value year:** Value year stands for the year when a property is built, but if considerable rebuilding or addition is made; the value year is changed to the year these actions are made (PWC, 2013).

**Net operating income:** The net operating income stands for rental revenues deducted by operational and maintenance expenses, ground rents and real estate tax (PWC, 2013).

# 2. Frame of reference

The frame of reference gives an overall review of differences between private and municipal companies and previous research on depreciations, continuing with a description of the component model in K3 and its advantages and disadvantages. The chapter also gives a picture of how a principle-based framework makes it possible for different institutional forces and accounting motives to affect accounting

# 2.1 Differences between private and municipal real estate companies

Private and municipal real estate companies are different in several aspects. Municipalities, unlike private companies, cannot go bankrupt since their position is regulated by the Constitution. Another important difference is that private real estate companies' business operations are driven from a profit maximizing purpose, while municipal real estate companies are normally not allowed to make profit, since they have more of a development purpose (Brorström et al, 2000). In 2011, it was decided that municipal real estate companies must be driven on a business basis. This was an exception from the rule that a municipal real estate company cannot make profit. The reason for introducing the regulation was to prevent municipal real estate companies from distorting the market since they could not have advantages towards private real estate companies. With the new regulation, municipal real estate companies cannot accept subventions or favor tenants with lower rents or better maintenance compared to the rest of the market. New building prospects and larger investments need to be self-financed, which indirectly means that real estate companies now charge tenants according to a market rate of return for their investments (Svensk Fastighetsmarknad, 2013).

Lind & Hellström (2011) claim the significant meaning of business principles is an ambition to maximize the profit, while SABO describes business behavior as the overall approach a non-subsidized company takes on a market, facing investments, the daily operations and its relation to other operators. SABO claim there are several ways of reasoning in what a business rate of return for investments is, and they think it includes a responsibility for the municipality, for the companies' principles being well communicated and transparent. Even though the law for municipal companies have changed, and now include a business purpose, they still have to promote housing in the municipalities and offer tenants a possibility to affect their housing (SABO, 2013).

# 2.2 Depreciation of buildings before K3

The depreciation periods of an asset are supposed to reflect the expected length of its economic benefits. Before K3 was introduced, buildings used to be depreciated as a whole with a constant percentage rate reflecting the expected using period. Maintenance was defined as actions restoring the original standard, and they were deducted instantly. Actions improving the standard were activated as investments and depreciated over the expected using period. This method was called the performance increasing method (Lind & Bejrum 2002; Lind & Hellström, 2011). Previous studies have shown that there are problems with this model. Ejermark (1997) shows that depreciation periods for apartment buildings are normally between 40 and 50 years from an abrasion point of view, and that building's components should be depreciated over their expected lifetimes. For instance, pipelines are expected to last for 40-50 years and bathrooms for 25-35 years. This was not consistent with how Swedish real estate companies depreciated their buildings, since they used a period of up to 100

years for the entire building. Folke & Nordlund (1999) further emphasize the need for division of components, as they find deficiencies in how housing companies reported their repair and maintenance costs for the first fifty years of a building's expected lifetime, versus the actual spending requirements.

According to Lind & Hellström (2011), another problem with the previous model was that earnings could fluctuate a lot and did not reflect the actual resource consumption. They argue that a consequence of fluctuating earnings can be that adjustments are made to smooth them. For instance, maintenance can be activated even though it should be deducted directly. Large maintenance projects can also be distributed over several years instead of deducting the whole amount one year. According to Hellman et al (2011), this use of the performance increasing method led to underestimation of earnings as planned maintenance was deducted as an expense, even though it fulfilled the asset criteria. This was followed by an overestimation in the years when maintenance was not made. According to Lind & Bejrum (2002), tactical considerations can make it harder to compare companies and give a misleading view of the economical reality. They claim that it can be hard to prevent the tactical aspects entirely, but they can be limited by more detailed rules of how different actions should be classified, and by common standards meaning that almost everything is either deducted or seen as an investment.

Enström and Matos (2000) find difficulties in classifying what should be an investment or maintenance in the accounting. Companies with weak economic statuses may feel the pressure to activate a larger portion of their maintenance to present better earnings, while companies with strong economic statuses may choose to deduct more for tax purposes. Stark (1994) finds that tax conditions are important in business decisions and how depreciations should be made, especially for private companies. The tax intentions come from a budget consideration where the largest possible depreciations are made to reach desired earnings.

# 2.3 K3, a principle-based framework

Unlike K2 that is rule-based and very detailed, K3 is based on a principle mind-set that requires several appreciations and assessments. These are two separate accounting systems, where the principle-based accounting starts from a relatively large amount of common principles. It is then up to guidance institutions, accounting experts and practitioners to jointly develop a functioning accounting practice (Grönlund et al, 2002). Maines et al (2003) and Burgemeestre et al (2009) state that since there is no room for own assessments in a rule-based framework, there are consequently no conflicts concerning depreciation costs or other issues. Factors such as comparability and consistent application between companies and over time are basically guaranteed by a rule-based standard. The disadvantage is that these standards may imply a lack of relevance and reliability in displaying the underlying economics of the reporting company. Furthermore, it is virtually impossible to design detailed standards that are perfectly adaptable for all companies, and most likely they will be incomplete or even obsolete when finally published.

The benefit of principle-based accounting is that the accountant can reflect a phenomenon in its proper meaning by making own assessments. Thus, it is impossible for a standard setter to entirely regulate how transactions should be reported. The accountant is instead equipped with guidance, and each unique transaction will be

presented in the best possible way in the financial reports (EFRAG, 2005). Maines et al (2003) describe that principle-based standards give more room for management's own judgments and interpretations. They mean that the goal of depreciation is to better reflect the economic depreciation of the asset. Managers arguably have more information about this than anyone else, thus the underlying purpose of financial reporting will be better reflected when managers have room to make their own judgments. Wyatt (2008) supports the opinion that principle-based rules work better than detailed rules. A higher degree of flexibility increases probability that a fair accounting of a transaction is presented. If it is left entirely to accountants to assess how assets should be reported, this will increase relevance to the reader. Folsom et al (2011) conclude that companies relying more on principle-based standards have a stronger link between performance and return and will thereby better predict future cash flows. Their findings also suggest that managers utilize the discretion provided by principle-based standards to better convey information to investors.

# 2.4 Component depreciation in K3

According to paragraph 17.4 in K3, tangible assets need to be allocated into components if they consist of significant components that are expected to have substantially different consumption periods. For instance, buildings can be divided into land, body, facade, inner surface, and installations. These components should be depreciated separately during their respective using period. Land does not have to be depreciated according to K3 since it has an unlimited using period (BFNAR 2012:1, EY 2013, PWC 2012).

K3 also results in changes regarding additional costs. In K3, additional costs are activated in the balance sheet when a component is replaced, if the actions on the component meet the requirements for the general asset criteria. Also, when actions related to non-significant components meet the general asset criteria, they are activated. A significant difference from the performance increasing approach, which sees the entire building as an asset, is that the component method assumes that each identified component is an asset (BFNAR 2012:1, EY 2013, PWC 2012). Nordlund et al (2013) use actions on the roof as an example of what can be deducted as an expense or seen as a change of component. If a hole in the roof is fixed, it is regarded as maintenance that should be deducted as an expense directly. However, if the roof is changed entirely, it is activated in the balance sheet if it meets the requirements for the asset criteria.

Lind & Hellström (2011) claim there are two basic principles for component accounting. The first one is that a component should have an economical relevance, which means the identified component should be relatively large in relation to the total investment and have a usage period that differs from other parts of investment. The other principle for component division is that the identified component should be connected to what is normally made in context. Thus, it is logical to divide components based on the types of actions expected in the future. For instance, if floors are renovated in one context and plumbing in another, they should be regarded as separate components. Parts normally not replaced during the building's economical lifetime should constitute a separate component (body), with depreciation periods that corresponds to the objects expected using period. What should be regarded as large and an action made in a certain context can vary depending on the company, and it is hard to say what is right and wrong. According to SABO (2013), the implementation

of component accounting requires a close cooperation between real estate engineers and economists to make assessments as correct as possible from the start.

# 2.5 Advantages and disadvantages with component accounting

Lind & Bejrum (2002) argue the problems with classifying buildings into different categories are dealt with by dividing them into components. There is also a clearer handling of maintenance and repairs. When a component is consumed and replaced, the accounted value is increased with the cost for replacing it. In this way, the accounted value will better reflect the actual standard of the component. Also, a better handling of incorrect assessments are possible since a component that has not been depreciated when it is replaced is written down, and the remaining accounted value is deducted as a cost. Lind & Hellström (2011) state that when maintenance costs are periodized, it results in a more true and fair view of earnings since they are spread out over the period when they increase the benefit for the business. In this way, municipalities do not have to make other adjustments to avoid deficits when large maintenance projects are made. The increased periodization of maintenance could also be beneficial for municipalities since they do not get the large fluctuations in earnings and do not have to make adjustments in the accounting when large maintenance projects are made. Starova & Cermakova (2010) also claim that when components are accounted for separately and depreciated based on their own lifetime it leads to a more true and fair view.

Colyvas (2009) argues that the component method is well worth the rising costs for implementing it, since it works as a tool for business in budgeting, planning resources and keeping track of the company's assets. The benefits can be seen in that component depreciation helps companies to reconstruct their asset registers. Colyvas' study in the South African public sector shows that when transferring to component depreciation, several entities in both the private and the public sector had a great need to reconstruct the facility registers. Previously, they often chose a using period suitable for tax motives, lacking some reflection when calculating the lifetime of assets. This has also been identified in Swedish companies by FAR (2013). The Swedish companies facility registers are often not compatible with the division of components and they have a lot of properties that need to be divided into components, which will be both time and resource consuming. Edlund & Skoglöv (2006); Forster et al (2006) give several examples of how component accounting should be applied in different companies. They conclude there are common practices in each sector on what should be seen as a component. In the companies studied, there was a tendency for municipal companies to apply a more detailed component division than private companies.

Despite the mentioned benefits, previous studies have also shown that there are disadvantages with component depreciation. There is increased administrative work with keeping track of more components, and there are no distinct boundaries in dividing components and assessing the classification between investments and maintenance. Also, expenses might be postponed when more costs are activated, which can lead to improved earnings the first year, but lower earnings the following years due to increased depreciations (Lind & Hellström 2011; Lind & Bejrum 2002). Colyvas (2009) claims that since component depreciation puts a lot of work on companies with updating their facility registers, it has to be done in due time before transition to avoid big complications.

# **2.6 Institutional forces**

Institutional forces have shown to effect accounting choices in the implementation of a new standard. According to Trombley (1989) such forces can consist of industry organizations and auditors. Schipper (2003) argues that if guidance is removed from a specific standard, companies and their auditors have to develop own guidelines and standards to comply with the purpose of the framework. To increase the measurement expertise, they also have to increase the competence needed to report specific assets and debts. Hellman et al (2011) claim that industry organizations will play an important role in assessing significant components. Since K3 is a principle-based standard, it implies that the principle is defined but the application is made in the companies. Colyvas (2009) states that since the assessment of an asset's using period is difficult, it is often based on experience from companies with similar assets. A barrier in the public sector is often that assets have been used for a long time and lack data from acquisition, which makes it hard to divide them into components and decide using periods. If companies are faced with a large-scale reconstruction of their assets register, auditors should be closely involved and informed in the following process, especially when significant costs occur to make corrections. When companies do not have the skills or capacity to handle all the work connected to a framework change, they need help from specialists.

Maines et al (2003) underline the need for more guidance when it is not present in the framework. They argue that the implementation and application of principle-based accounting standards can be hard, since they are dependent on joint efforts by the management, the board and auditors regarding professional competence and judgment to reach an unbiased financial reporting. In the transition from a rule-based method to a principle-based method, it is common to demand more guidance than is provided by principle-based frameworks; thus it is also important to obtain guidance from experts. Jamal & Tan (2010); Tweedie (2002) further show that a change to a more principle-based accounting requires support from an auditor with a principle-oriented mind-set, to reach its full potential. The auditor's role is considered to have a great importance when a principle-based framework is used, since they can emphasize the economical substance of a transaction to achieve a true and fair view. Thus, auditors seem to have a principle-oriented approach.

Healy & Palepu (2001) claim that auditors will add a new service with a more complete audit report and argumentation regarding the faithfulness of the financial reporting. Furthermore, the harmonization achieved by a principle-based framework is expected to generate benefits when auditors and clients develop common interpretations and practice. Since consolidations favor a common accounting method for their subsidiaries, the harmonization process is driven forward and the comparability increases. However, Carmona & Trombetta (2008) emphasize that a principle-based framework puts increased responsibility on auditors to assess a large spectrum of accounting standards to be applied. This increases both the audit and legal risk. Agoglia et al (2011) claim that, with a principle-based standard, preparers are more focused on reporting the economic substance of a transaction and are affected by the opinions of regulators. They also find that auditors' influence on aggressive reporting decreases when standards are more principle-based. Ball et al (2003) argue that auditor's and management incentives have greater impact on the financial reporting than accounting standards.

#### 2.6.1 Specific guidelines for K3 from industry organizations and experts

SABO's guidelines are focused on developing general guidance that specifies thoughts and principles behind the framework, to create a lowest level of satisfaction for component accounting. They identify nine classes of components that can be used: land, land facilities, building and land inventories, body, roof, façade, inner surface (floor, walls, inner roof), installations (electricity, pluming, ventilation, elevators) and tenant adjustments. When it comes to activating or deducting maintenance, SABO mean that actions with estimated using periods of three years or less could be deducted directly. Also, replacements of small parts of components are normally deducted immediately while major changes, such as replacement of a stairwell, are often activated and depreciated from the date of acquisition. SABO address the problem that retrospective application is not allowed and asks the question how the work can be made without too much administrative work. Thus, they argue the component distributions for the opening balance can be standardized even if it is important to consider the components' different using periods as well as make individual assessments for each property (SABO, 2013).

Nordlund et al (2013) lift the issue of putting the old population of properties into the new component method. They claim that in situations where companies lack facility registers to handle the component method, a weighted depreciation percent can be calculated to reflect the actual conditions. As the components are changed, the replaced components are listed in the facility register. FAR (2013) further explain how a weighted depreciation method will ease the transition to K3. They suggest that companies choose a representative property for the population and make a complete analysis of its components. Type of building, condition and age at the time of transition, and the geographical location are important factors to consider. In order to use this method, it is important to be able to estimate that the weighted depreciations on each property do not substantially differ from what they would have been if complete divisions of components for every property were made. For the decision of using periods, FAR recommends that properties are divided into buildings and land, that values are allocated to land facilities and building/land inventories and lastly the remaining part is allocated to each component as net accounted value, and using periods are determined for each component. Alternatively, the remaining part is depreciated a weighted method. When divisions into components are made, it is not based on a retroactive analysis of when they have been replaced or the actual acquisition values. Instead, the analysis is based on a technical inventory of the property's physical status at the time of transition.

PWC (2012) suggest different limits for when a component should be accounted for. A possible starting point for different interpretation problems is to analyze the effects on different key ratios if a certain component is accounted for separately or not. Another potential segment to analyze is the impact of component depreciation on reported earnings. By setting percentage rates, companies can show how much a component should represent of a total investment cost to be reported separately. PWC claim it is reasonable to activate costs to the extent they increase the value, thus deducting the remaining part as an expense directly. They recognize the difficulty in deciding what adds value, but think it is logical to make the assessment against the asset's original performance.

# **2.7 Accounting motives**

The management has discretion over accounting choices and operative cash flows (Phillips et al, 2003). They can use different accounting methods such as size of accruals, activating or deducting expenses for maintenance and repairs. Companies can also use operating methods by distorting their strategies to affect how external parties perceive their condition. These include decisions regarding production and investments (Weil 2009, Ronen & Yaari 2008). Lambert (1984) finds that the management can use investment and production decisions to decrease variability in the company's total value. Lind & Bejrum (2002) describe the way companies use investments to affect reported earnings. In situations where they want to improve reported earnings, investments can be activated to achieve this. In the same way, a company with already good earnings can deduct as much as possible as an expense from a tax point of view, or to build a future buffer.

Callao & Jarne (2010) showed that the adoption of IFRS in the European Union increased the scope for discretionary accounting. For instance, the accruals have increased in the period following the implementation. With these results, they argue for an increased need of professional ethics to overcome the opportunism, especially in the early years, and for effective control mechanisms to ensure that financial reporting achieves a proper level of quality. Clarkson et al (2011) find that IFRS increased the reporting quality in the countries studied. This strengthens the opinion of enhanced compatibility when a principle-based standard is introduced, provided there are professional ethics and effective control mechanisms in place to support it. Bailey & Sawers (2012) study shows that a principle-based framework decreases the comparability since companies can affect the results in a particular direction through their opportunistic behaviors. Jeanjean & Stolowy (2008) claim that shared accounting rules alone are not sufficient in creating a common business language. Management incentives and national institutional factors also play an important role in characterizing financial reporting. The extent to which manager's discretion is used depends on company-specific characteristics such as reporting incentives, operational characteristics, and legal institutions.

#### 2.7.1 Positive Accounting Theory

The PAT describes how different contractors affect a company's accounting choices. The company's relation to its owners is seen as a principal-agent relation, where the management of the company is the agent and the owner is the principal. Since the management has the discretion to handle accounting choices, it can give them larger advantages compared to other contractors; they can act opportunistically. They can also use the discretion to increase other contractors' wealth. The greater the company or municipality is, the greater the agency problem will be (Watts & Zimmerman, 1978, 1986, 1990; Copley & Doucet, 1993). If there are few owners, the management and the owners often have the same interest and can be the same person. This leads to a decreased demand on the company's accounting with few owners, since they have a good insight in the company and do not have to trust the financial reporting. If the company grows and new owners are added, there will probably be conflicts between the management and the owners (Nilsson 2002, Jensen & Meckling 1976, Watts & Zimmerman 1986). The managers' discretion is different between companies depending on the costs and advantages with the restrictions (Watts & Zimmerman, 1990)

PAT often uses three types of hypotheses: the bonus plan hypothesis, the debt/equity hypothesis, and the political cost hypothesis. The bonus plan hypothesis states that managers are more likely to use accounting methods to increase reported income in the present period. The hypothesis of debt/equity predicts that the greater a company's debt/equity ratio is, the more likely it is for the managers to use accounting methods that increase the income. The hypothesis of political cost predicts that large companies rather than small ones are more likely to use accounting choices that reduce reported profits. Size is a substitute variable for political attention. Given the cost for information and monitoring, managers have incentives to use discretion over the accounting methods, and the contractors in the political process settle for a reasonable amount of opportunism (Watts & Zimmerman, 1978, 1986, 1990; Healy, 1985). Zmijewski & Hagerman's (1981) study also indicates that apart from size, also the rate of concentration, management compensation and debt to equity ratio influence a company's income strategy. Companies will often choose an overall income strategy, of which individual accounting choices are a part.

Dhaliwal et al (1982) find that management controlled companies are more likely than owner-controlled companies to use income-increasing accounting methods. They find that there is a significant difference in depreciation methods used by management controlled and owner-controlled companies to affect the financial reporting. Stark (1994) shows that the type of organization has an impact on depreciations, both for applicable legislation and opportunity to transfer money from the company to the owner. Municipal companies exist to provide the inhabitants with housing, while private companies have larger opportunities to change the aims of their business and can sometimes have personal motives behind the owning of properties. According to Stark (1994), the view on depreciations will not be as different between companies with different owners in the future. Instead, large companies will differ from small, dominating companies will differ from their competitors and companies with different strategies will differ in their view on depreciations.

Watts & Zimmerman (1986) claim that other factors than accounting affect the value of the company and the management's assessments. Most studies focus only on one accounting method, for instance, political cost, instead of combining several different methods. This could provide a better picture of the situation, since the management often looks for a combination of several methods to affect the accounting. Another criticism posed against PAT is the difficulty for researchers to know exactly how the management wants to affect the numbers. For instance, the goal may be to periodize revenue to the coming year instead of increasing it for the present year.

# 2.8 Summary of the frame of reference

The new requirement for component accounting in K3 will result in assessments of component lifetimes and changes for additional costs, which should be activated if they meet the requirements for the general asset criteria. According to previous research, component depreciation will provide a clearer handling of maintenance and repairs, a better handling of incorrect assessments and a more true and fair view achieved by separate depreciation of components based on their own lifetimes. Since K3 is based on a principle-based mind-set, it requires several appreciations and own assessments as well as auditors with principle-oriented mind-sets. It is also important that managers, board members and auditors work jointly to implement and apply the framework to achieve harmonization. Previous studies have also shown that the

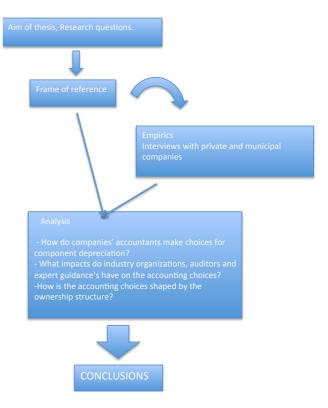
implementation of a new standard requires guidance from someone else than the standard setter, especially industry organizations will play an important role. Companies might also develop own guidelines when they are not given in the accounting. The accounting choices made for component depreciation can also be affected by the ownership structure and different accounting motives. According to PAT, the demands on companies' accounting are expected to decrease if the owner concentration is high, and the political cost associated with large companies leads to a greater demand for a true and fair view in the accounting than for small companies. Large companies or companies in highly concentrated industries are more likely to use accounting methods that maximize their own benefit. According to previous research, the implementation of a principle-based framework will increase the discretion for accounting choices and the reporting quality but also decrease the comparability. The municipal companies are likely to use depreciation differently than private companies depending on their different strategies.

# 3. Methodology

The purpose of this chapter is to describe the study's approach to answer the research questions and to clarify the thesis' procedure. It contains the approach, attitude and research methods of the study and how these have been used to fulfill the purpose. Also the thesis' validity, reliability and source criticism are discussed.

# **3.1 Disposition of the study**

This model was formed to provide understanding of the study's disposition. According to the purpose, the research questions and the contribution of the study, an overall literature review was made in the field of previous research and applicable theories. After the literature review, the frame of reference was designed within the frames of concepts, previous research regarding depreciation component and depreciation, and theories regarding institutional forces and motives for accounting choices. Based on this, an interview guide was designed, and after the interviews were conducted, previous research and theories were compared and analyzed with the empirics to provide a result.



# 3.2 Course of action

Similar to the process described by Blumberg et al (2008), the research process began with identifying a dilemma, which triggered a need for a way to solve it. The research dilemma was how component accounting should be dealt within the K3 framework. Initially, a literature review was made together with a review of earlier research in the area of accounting to find relevant problems to explore, and where continuous research could be made. To get inspiration on topics and current problems debated among accounting professionals, articles were read from the Swedish accounting journal *Balans*. A frequently debated subject was the new demand for component depreciation. Since 2014 was the first year K3 and component depreciation should be applied, a knowledge gap was identified regarding practical handling of the new framework as well as potential impacts of external and internal forces. Consistent with the identified problem area, the research questions and purpose of the study were formulated in order to create a basis for the continuing research process.

# 3.3 Research approach

The study was based on a hermeneutic attitude, described by Bryman & Bell (2011) as giving understanding of different behaviors from an interpretative point of view. The aim was to explore how companies act concerning component depreciation and to create a deeper understanding of the underlying reasons for their actions, based on theories regarding accounting choices and institutional forces. Furthermore, a deductive approach was used since previous research and existing theories formed a

basis to analyze the empirics. Conclusions were drawn from experiences by collecting information, analyzing it and finally come to a conclusion consistent with Patel & Davidsson (2011); Blumberg et al (2008). The real estate companies were deeply examined to explore both similarities and differences between the two different ownership structures.

The major reason for choosing a deductive method was that it strengthened the objectivity of the research as it was based on existing theories. The number of interviews was not considered to be large enough to shape own theories based on the results. The deductive method was also chosen since the aim of the thesis was to contribute with a practical relevance for the standard setter and the real estate business rather than a theoretical contribution. Thus, a deductive method was more suitable where theories could be applied on the empirics to see if they were consistent with reality. By applying previous research and theories on the empirics, the analysis was given a deeper context providing an interesting angle for future research (Patel & Davidsson (2011).

# **3.4 Research strategy**

A qualitative method was used without focus on quantitative or statistical result, but rather on creating insight and interpretations on the companies' ways of dealing with component depreciation. Consistent with Patel & Davidsson (2011), emphasis was put on words and perceptions to create an opportunity to go deeper into the identified problems and obtain a richer range of information. By making a qualitative study with deep interviews, motives for accounting choice and influence from institutional factors were explored thoroughly to create a picture of the new depreciation process. The reason for choosing private and municipal real estate companies was that they were large operators in the real estate market with different ownership structures. The accounting choices made in those companies were explored to see if there were any differences between these two ownership structures in how they handled and were affected by the requirement for component depreciation. The interviewees' perceptions of component depreciation were central in the study, thus the qualitative method provided detailed insight and understanding of their views.

# **3.5 Interviews**

The data collection in the study was conducted through semi-structured interviews to provide the interviewees with specific questions they could elaborate on (Patel & Davidsson, 2011; Bryman & Bell, 2011). The reason for choosing semi-structured interviews was that some structure was required to make it easier to compare the respondents' answers with each other. It was also important that they had the opportunity to respond freely from their knowledge and experiences, but simultaneously adapting their response to the context of the questions. By having the opportunity to ask follow-up questions, a deeper understanding of causes and effects was obtained, which would have been more difficult to do in a survey or a structured interview. The time of the interviews ranged from 40-60 minutes. The interview questionnaire was sent beforehand by e-mail the each respondent for them to be well-prepared and to make the most out of the interviews.

# 3.5.1 Design of interview questions

The preparation and writing of the interview guide was an important part of preparing for the interviews. In the design, open but specific questions were formed closely related to the purpose and the three areas of the study. This was to make it easy for the respondents to answer them without interfering flexibility. The structure and clear division of interview areas were chosen to increase comparability and give less room to discuss inadequate topics (Blumberg et al, 2008); Bryman & Bell, 2011).

#### **3.5.2** The selection of respondents

The selection of respondents was linked to the purpose of the study by choosing unlisted private and municipal real estate companies that applied K3, except for one company that chose the K2 regulatory. This company was chosen to further explore potential effects of companies' different ownership structures and accounting motives. Since the study was qualitative, a smaller number of respondents were chosen to conduct the interviews (Bryman & Bell, 2011). This resulted in relevant data for the research, but generalizations were hard to make since eleven interviews cannot be seen as representative for the whole population. Common for the chosen companies was that an essential part of their balance sheet consisted of tangible assets, mostly in form of properties, and that they were all active in the business of renting and administering properties. Both private and municipal real estate company's structures were explored to find out if they had different motives for depreciation. These differences may not have been found if the focus had only been on the same type of ownership structure.

The selection of companies was also made based on their size and whether they were part of a consolidation or not. The reason for this choice of categorization was that major companies must always apply the K3 regulatory, provided they are not part of a consolidation that applies IFRS. Similarly, smaller, private parent companies that are part of a larger consolidation must also apply K3. In the selected companies, interviews were made with CFOs and employees with extensive knowledge in the field. To randomly select people and interview them about component depreciation would not have generated useful information, since the subject was specialized and required the respondents to be familiar with accounting in order to participate.

#### **3.5.3 Presentation of respondents**

Company A is a municipal real estate company that has chosen to be anonymous. The interview was conducted with the CFO at the company.

Mölndalsbostäder AB is a municipal real estate company, fully owned by Kvarnfallet Mölndal AB, which in turn is owned by the city of Mölndal. The company manages about 3500 rental apartments. The interview was made with Henrik Lyréus, CFO and Pontus Leonardsson, business controller. The company will henceforth be called Mölndalsbostäder.

Göteborgs Stads Bostadsaktiebolag is a municipal real estate company that is part of the consolidation Förvaltnings AB Framtiden, fully owned by the city of Gothenburg. The company has about 23000 apartments. The interview was conducted with Lena Quick, CFO, and Anders Högberg who had the overall responsibility for the work with component depreciation. The company will henceforth be called Bostadsbolaget.

Familjebostäder i Göteborg AB is a municipal real estate company that is also part of the consolidation Förvaltnings AB Framtiden. The company manages about 18 000 apartments in Gothenburg. The interview was conducted with Anna-Karin Olsson, accounting manager. The company will henceforth be called Familjebostäder.

Öckerö Bostads AB is a municipal real estate company situated on the islands outside Gothenburg. They own about 400 apartments, and is a small company according to ÅRL. The interview was made with Hans Andreasson, CFO. The company will henceforth be called Öckerö.

Norrahammar Kommunala Bostäder is a municipal real estate company with a population of 1100 apartments situated outside of Jönköping. They are part of a consolidation with seven real estate companies owned by the parent company Jönköpings Rådhus AB. The interview was conducted with CFO Susanne Johansson. The company will henceforth be called NKBO.

Ivar Kjellberg Fastighets AB is a private real estate company that owns about 1270 apartments. The interview was conducted with Dag Bergäng, CFO. The company will henceforth be called Ivar Kjellberg.

HSB Göta is an economic association owned by 23,000 members. The population consists of about 150 properties of which half is rental. The interviewed company was the parent company, which is responsible for member activities, new production and financial business. The interview was conducted with Eva-Lotte Skoglund, CFO and Gunnel Gustafsson, accounting manager in the real estate companies.

Jönköpings Bygginvest AB is a private real estate company with 2485 rental apartments. The interview was conducted with Fredrik Erlandsson, CEO, and Thomas Magnusson, CFO. The company henceforth will be called Bygginvest.

Svenska Hus is a private real estate company operating in Gothenburg, Stockholm and Öresund. They are part of the consolidation of Gullringsbo, and in Gothenburg they administrate a total of 29 properties. The interview was conducted with Måns Johannesson, CFO.

Alexandersson Fastigheter i Göteborg AB is a small private real estate company with 450 apartments. The interview was made with Anna Månsson, CFO. The company will henceforth be called Alexanderssons.

# **3.6 Processing the information**

All except for one of the interviews were recorded; thus, the respondents' answers could be listened to and analyzed retrospectively. The recording and transcribing helped to improve the memory of the process and made it easier to make an accurate analysis of what the respondents had said. Repeated examinations of the respondents' answers were also possible to conduct (Bryman & Bell (2005). Another reason for recording the interviews was to increase the concentration on the answers and to ask follow-up questions. After the interviews were made, adequate information was selected from the recordings and then transcribed to constitute the empirics. At this stage, no interpretation was made; the information was complied later on to reduce each individual observer's subjectivity. Based on the empirical section, an analysis was made and finally conclusions were drawn. When the study was published, it was possible for other researchers to make secondary analyses. In that way, the recorded information could be used several times with other purposes, compared to the focus of the original investigation (Bryman & Bell, 2005).

# **3.7 Methodological problems**

Much work was spent on the structure of the interview design to manage methodological problems, especially errors in terms of non-response and response errors. Non-response errors occur when the researcher cannot locate the person to be studied, or is unsuccessful in encouraging the person to participate (Blumberg et al, 2008). A non-response error was experienced at the initial stage, since there was a loss in terms of companies, which had not chosen to apply K3 or had not progressed far enough to be prepared for an interview. To reduce the risk for response errors in terms of participant-initiated errors, which occur when respondents fail to answer accurately by own choice or because of incomplete knowledge, the questions were made as easy as possible to interpret. The questions were also asked in a neutral way to minimize the influence of asking inappropriate questions, emphasizing words, tone of voice, and body language (Blumberg et al, 2008). The qualitative research opened up for new knowledge and understanding through the process of interviewing, as more was knowledge was gained about the subject after each interview. According to Patel & Davidsson (2011), this can be a disadvantage, but since the interviews proceeded from the same semi-structured interview guide to maintain comparability and connection to the purpose, it did not affect the process negatively.

# 3.8 The quality of the study

#### 3.8.1 Reliability

According to Bryman & Bell (2005, 2011), it is often easier to achieve higher reliability in a quantitative research as it increases the credibility of empirical data and probability that the results will be the same if the study is performed again. Since the study was based on qualitative interviews, it could imply a risk for reduced reliability. Due to the fact that component depreciation was mandatory for the annual reports of large non-listed Swedish firms in 2014, it would be important to consider that the result may vary and change if this study is repeated at a later stage. It was also considered likely that the respondents' personal development and mood since the previous measurement could result in a different impact on the study if it was performed again (Patel & Davidsson, 2011). However, the reliability of the data analysis was considered to be high since there was a clear description of how the study was designed, executed and how the conclusions were made.

# 3.8.2 Validity

Validity implies the relevance of empirics, and whether the study measures what it intends to measure (Patel & Davidsson, 2011). By designing the interview guide based on the research questions, the collected data was used to fulfill the study's purpose. According to Denscombe's (2009) findings, the transcripts were sent to each respondent to give them an opportunity to verify and confirm what had been said to increase the validity of empirical data. Another way to improve validity can be to use triangulation, which means that several different sources are used to verify the data and conclusions (Patel & Davidsson, 2011). Since the study was conducted by a total of eleven interviews with both private and municipal companies in the real estate business, it was based on triangulation.

#### 3.8.3 Source criticism

In the data collection, a critical approach was used and assessments were made of whether the facts were reliable (Patel & Davidsson, 2011). In the critical review, it was important to make a distinction between primary and secondary sources. First-

hand reports are classified as primary sources collected by the researcher, while secondary sources are collected by other researchers (Blumberg et al, 2008). The study's primary sources, in terms of interview respondents, were all highly involved in the new process around component depreciation. Our informants were either CEOs or CFOs, and their answers were honest, even if they might have been slightly biased to benefit their companies. The secondary sources consisted of scientific articles, books in the field and relevant journals from accounting experts. The data was critically reviewed by identifying the authors, the origin of the source, and the motive and intent behind it (Denscombe, 2009).

# 3.9 Analysis model

The analysis model aims at illustrating the basis for how the problem was explored and how the analysis was made. The study explored and analyzed how private and municipal companies handled the requirement for component depreciation in practice. Since K3 was principle-based, it gave room for accountants' to make individual choices for component depreciation, thus their accounting would naturally be affected by different institutional forces and accounting motives.



# 4. Empirical findings

In this chapter, the result from the study's qualitative research is presented. The collected data from the interviews are divided into three categories related to the research questions. The companies are presented in two groups, municipal and private to make it easier to compare them to each other, except for the part regarding facility registers where it was possible to present them in the same section. A brief presentation of each company is made in the methodology section, where the companies are just mentioned by name. The empirics will constitute a basis for the analysis in order to answer the research questions.

# 4.1 Practical handling of component depreciation

# 4.1.1 Division of components and handling of maintenance in municipal real estate companies

All municipal companies in the study started the work with component depreciation well ahead and had come relatively far in dividing components and establishing routines. The economic department in each company worked closely with the real estate engineers and the technical personnel to obtain as accurate values and usage periods as possible. The municipal companies had a few common components they all used, including body, roof, façade, windows, and installations. Another common thing was that they used standard buildings based on value year or year of construction to represent a group of buildings and ease the work with component division. However, assessments were also made individually for every property to take into account specific actions. Except for Bostadsbolaget and Familjebostäder that decreased their overall depreciations due to a high rate of depreciation before K3, all companies got increased depreciations with K3.

Company A said that their standard buildings differed from each other in characteristics such as exterior corridors and stairwells. Their component division was quite detailed; for instance they divided the roof into categories such as brick roofs, paper roofs or steel roofs. The body was accounted to last for a maximum of 100 years, and the windows no more than 20 years. The division of components at the initial stage was considered to be very theoretical. For instance, two properties from the 70's could differ in book values, thus one component could have different values depending on the rate of activation and depreciation during previous years. The company also discussed that extra help might be hired if everything had not been put into the systems. Mölndalsbostäder were in the second year of accounting with components, being one of the first real estate companies starting to apply K3. Not to get an arbitrary division of components, they engaged consultants in developing list of components. They divided buildings into 16 components, and for each group there were 4-8 sub-components, for example, roofs or floors of different materials. Each sub-component was assigned with an estimated technical lifetime corresponding to the component's accounted limit for depreciation. To distribute the book values of their remaining components, their own experience and other operators' suggestions were weighed together.

Bostadsbolaget and Familjebostäder were part of a consolidation, thus they developed a common policy for the structure of components. Company-specific, they had a component called "climate shield", and a residual containing actions such as painting and wallpapering when reconstructing. The climate shields were divided into roof, facade, windows, and balcony. The real estate engineers in the consolidated companies worked jointly and obtained an average they used for components' lifetimes. For instance, the body and foundation were set to 100 years since a lot of houses in the population were old. Considerations were taken to large investments made the last ten years to allocate the values to the appropriate component. For the rate of detail, the main focus was to make it manageable. A specific employment was created in Bostadsbolaget to adapt to component depreciation.

Öckerö developed a set of components they could choose from for both housing and facilities. Company-specific, they had a lot of washing and painting activities since they were situated on the islands and had less focus on large replacements. They also put a lot of work on installations; for instance, electrical installations were separated since they represented a large part of the total installations. They saw a risk in simplifying too much since it could be hard to manage if the division was too simple. The body ranged from 40-120 years, for a new building it was often set to 120 years. They used common key ratios to assess the lifetimes of components, and hired consultants who used information from Svensk sektionsfakta and Byggtjänst, which were books and computer software for real estate calculus. NKBO divided their properties into 12 components. Company-specific, they had an item called "impairment", as this was hard to allocate to each component. They developed a template where the property manager surveyed how many years each component was expected to last. The book value was distributed according to the developed percentage rates, which had been made individually for each property. They said that they made some standardization, since it was not possible for them to have one person entirely focused on component accounting.

Regarding the activation or deduction of maintenance, all municipal companies had some increase of activation as a result of K3, since they had different degrees of activation before. During the first years after transition, they argued that the increased activation would result in larger increases of earnings. Their work was based on achieving correspondence with planned maintenance, not to get too high disposal expenses and that it would not just be a paper-product. Company A, Familjebostäder and NKBO emphasized that if costs were activated to a greater extent, the assets value would come closer to the market value, which could lead to a need for impairment. Company A, NKBO and Öckerö also argued that the activation criteria within K3 would result in a narrow distribution of components with a lot of actions falling into the grey zone. Sometimes it could be hard to draw a line between investments and maintenance since no one had any clear answers.

Company A argued that with K3, they did not become as dependent on years with planned maintenance. Actions such as body renovations were often very expensive, and previously when they were deducted directly in the income statement they looked a lot on other costs which they had during the year. For Mölndalsbostäder, larger actions would often result in a change of component. They did not have an amount limit for what should be activated. They wanted to control it through projects, thus they would know how to put it in the facility register. Bostadsbolaget and Familjebostäder used a limit of 25 % for a change of component to be activated. Familjebostäder worked a lot with small projects, thus amounts over three million SEK were assessed if they acquired K3. Bostadsbolaget built most of the properties themselves, and if the change per earning unit and component exceeded five million,

it was activated. While Familjebostäder believed their activation rate would increase with 25-30 %, Bostadsbolaget thought it was hard to say if K3 would lead to more activation. They meant it depended on how projects were packaged, but their forecast generated a five percent increase of activations.

Öckerö claimed that even if they would activate more, the expenses for maintenance would not disappear entirely. A large part of their maintenance work was not regarded as a component change, but upshaping in terms of washing, painting, or changing a few facade bricks. Activations were made when the entire roof or facade was replaced. NKBO had an area with properties having low book values where body renovations were made. When these renovations were activated in the balance sheet, components for water and drain could constitute a large part of the property's total book value. They also said that when previous changes of the body in a building were made, 75-80 % of the total cost was deducted as an expense depending on the action, whereas now everything would be activated.

# **4.1.2** Division of components and handling of maintenance in private real estate companies

A common factor for the private companies was that they had not come as far as the municipal companies with the work for K3. They did not plan to bring a wide range of components into their accounting and differed from each other in the kind of components they identified. More general assessments and standardizations were made based on factors of a typical property, such as the depreciation rate and what was contained in various components. The overall depreciations would increase but not too much, or they would have to be outweighed by increased activations, since it was important to reach the earnings targets.

Ivar Kjellberg ended up with a total of eight components. They decided the body's using period should be maximum 100 years on the older properties, but had not made complete decisions on the newer buildings. They argued that components requiring maintenance over time, such as roof and windows, reasonably should have a shorter depreciation period. Some buildings' depreciation rates would increase more compared to the overall depreciations. For instance, they had an old property where they planned a big reconstruction resulting in a higher depreciation rate. For HSB Göta, the SABO model constituted a minimum amount of components, but they deviated from it to suit their own business and housing plans. In situations where major renovations were made to give the house a unique value, they applied individual assessments. All assessments were made in close cooperation with the building engineers and the property manager.

Bygginvest paid much attention to the technical using period for their division into components. For example, they replaced windows, roof and facade at the same time, thus this was consequently added on the same component. From the beginning, they discussed a using period of 100 years for the body, but they thought it might be increased to up to 150 years, depending on the auditor's opinion. They did not plan to make any individual assessment of each property. They rather planned to divide them into three or four different groups based on value year since they argued it was unreasonable to hire people for extra work. Svenska Hus approach for the component division was that it would not just be a desk product, but in the same time manageable. So far they had identified ten components where tenant adjustments were more company-specific. Some components initially proposed had become quite small, thus if they were not regarded as significant, they were put on a different component. Svenska Hus thought they would base their assessments on standards where, for instance, a roof was expected to last for 25 years. They also said they had to distribute guidelines to the real estate managers not to get too large differences in estimations.

When it came to the approach to activating or deducting maintenance, the result showed that private companies, except for Ivar Kjellberg, previously activated maintenance to a greater extent than municipal companies. Similarities could be seen between Ivar Kjellberg and Bygginvest, since they both planned to activate costs based on the size of projects. Since Ivar Kjellberg had a lot of old buildings, everything was considered to belong to the body, except for some of the new and ongoing renovated buildings. Traditionally, they deducted a lot of their maintenance directly, but now argued there were higher demands on activating more actions. Bygginvest would not activate single painting projects or stove replacements, but rather when an entire stairwell was replaced, all the associated work would be activated. Since Svenska Hus accounting had been similar to K3, their activations would not increase a lot. However, for large volumes and investments, activations would be made to a greater extent. HSB Göta had not yet worked out clear guidelines for the activation process. In their opinion, it could be difficult to set up monetary limitations for activation; they would probably continue to follow the previous performance increasing method to some extent. As they already activated a lot of rebuilding activities before K3, they did not think the new framework would result in essentially increased depreciations.

#### 4.1.3 Managing facility registers in municipal and private real estate companies

The municipal companies had come further than the private companies in updating their facility registers for K3. However, all companies established a separate register for tax. Since K3 led to greater differences between accounted earnings and tax earnings, they also claimed that it imposed higher requirements on the accounting systems. For instance, Öckerö explained that the body could be depreciated over 33 years taxwise while it was depreciated over 120 years in the accounting. The elevator, on the other hand, could be depreciated over 20 years in the accounting and over 33 years in the tax declaration. Company A, Mölndalsbostäder and Familjebostäder disposed their facility registers and established new ones, while other companies updated their existing registers. Bygginvest argued it would probably be better for them to dispose and activate everything again, but they did not have enough resources to do that. Company A and NKBO also argued that the facility register worked as a decision support, while Bygginvest thought it was time-consuming as the operative managers had to calculate, for example, how many hours the painters worked per week. Both Company A and Svenska Hus thought that the companies providing economy systems were late in handling the issues related to K3. Mölndalsbostäder drew benefits from their previous classification in accounting that was similar to the component model. Svenska Hus claimed that many companies in the real estate business use similar systems, which would eventually lead to harmonization of the practical work with facility registers.

# 4.1.4 Advantages and disadvantages with component depreciation for municipal real estate companies

All municipal companies thought K3 would provide better information to the users of the annual report and in this way provide a more true and fair view. For the municipal companies, except for Bostadsbolaget, it would also decrease fluctuations in earnings. Bostadsbolaget claimed they did not have large fluctuations due to their large population of properties. Regarding the disadvantages, the municipal companies thought the new framework brought a lot of extra work and administration. They also argued that comparability would be worsened by K3 since all companies handled it differently and made their own standardizations.

Mölndalsbostäder saw a benefit in departments being forced to cooperate closer, which led to increased understanding for each other's work and the company's earnings development. They also emphasized the connection between components of newly produced properties; their lifetimes would be obtained from the facility register, which would ease the work. Bostadsbolaget and Familjebostäder did not think the transition would be a great issue for them, since they had large populations of properties and had support from the municipality. NKBO argued that assets coming close to market values with the increased activations possibly would result in more frequent external valuations, which could be expensive. Company A argued there would be a lot of extra administration if their assessments turned out to be wrong. Familjebostäder did not think analysts or project managers looked specifically at components in the accounting, but rather at the building's physical status and made estimations whether parts should to be changed or not. Öckerö also saw an increased risk for large fluctuations in earnings between years. Previously, a considerable budget might have been set for maintenance, and some large projects had been made but mostly small ones. With the new system, the facade might have to be made in one year, and then almost the entire maintenance budget would be used and activated. Another year there might be only painting work done.

# 4.1.5 Advantages and disadvantages with component depreciation for private real estate companies

The private companies thought K3 would result in a somewhat more true and fair view of the properties, and that it eventually could be interesting so see a history of what had been done in the buildings over the years. HSB Göta and Svenska Hus claimed it would be useful for the real estate managers and the economic department to communicate and improve their cooperation. However, the overall attitudes from the private companies towards the new framework were more negative. Apart from HSB Göta, they all thought the division of components did not fulfill any real purpose, since potential buyers were more interested in market values, market return, and the condition of the property. They also claimed that component depreciation was not very important for the real estate business since the companies were measured on substance and the value the properties produced rather than earnings. Another common opinion on the negative side was the increased administrative burdens and costs. Bygginvest emphasized that the increased activations with K3 would continuously build up the balance sheet, similar to Familjebostäder, Company A and NKBO. HSB Göta also saw uncertainty as one of the major issues; the industry standard used to be a depreciation rate of 1-2%, but with the lack of clear guidelines, they claimed, it would be difficult to compare real estate companies to each other.

They also claimed that creditors would need to compare activations between different companies and how they reasoned regarding lifetimes.

#### 4.2 The impact of institutional forces

#### 4.2.1 Municipal real estate companies

Since the municipal companies started their work and preparations for K3 quite early, there was not a lot of guidance available initially. They all used SABOs guidance or thought their course of action was broadly consistent with it. This was particularly related to Bostadsbolaget and Familjebostäder, who started their preparations before there was any guidance available from SABO, and Mölndalsbostäder as they were in the second year of accounting according to K3. Another common factor for the municipal companies was that they all identified insecurity in accounting practices among auditors, and that they initially would have appreciated to have a more detailed guidance for component plans. With this in mind, they argued for a need of more statements from guiding authorities coming in due time. The municipal companies also visited networking seminars, primarily arranged by auditors, where the goal with component accounting was discussed, mostly addressing how to think rather than apply practice. For instance, the information regarding facility registers mostly focused on the need for having a register, not going in-depth on how to handle it.

Company A also argued for the importance of other companies' experiences when they started their work with component depreciation, especially Partillebo and Mölndalsbostäder, since they introduced the new framework one year ahead. However, Company A looked on their specific situation to see what was best for them and ended up somewhere in between the above mentioned companies regarding the rate of detail. They thought SABOs new recommendation was the best, but all answers were not given there. Most questions arose when they started to work practically and a lot of discussions were made with the auditors, but they did not have clear answers on specific questions. The auditors were not strict, but rather listened to how the company argued for their assessments. For Mölndalsbostäder, it was convenient to set their own practice. The auditors were fairly satisfied with their model being consistent with SABOs recommendations, but in some areas they were quite strict, which forced Mölndalsbostäder to make some changes in their models. For instance, the auditors did not accept their previous model with a technical lifetime of 150 years for the body, thus they had to change it and shorten the depreciation time. Mölndalsbostäder argued it was important to convince the auditors that what they did was right and reasonable. They also argued that if the recommendation from SABO published in 2013 had come earlier, it would have made the work easier.

Bostadsbolaget and Familjebostäder began to work out a model for component depreciation early within the consolidation, as they needed a comparison year to work against. They argued it was better to develop something on their own, and the auditors could accept or reject it. They also saw benefits to take the lead, not having to adapt to something that was not good. The auditors accepted the model, but also emphasized that there was nothing to base on or compare to. Bostadsbolaget and Familjebostäder also looked at Mölndalsbostäder when developing their model. They thought it was difficult to know how comprehensive it would be, but said they would test it and maybe revise it later. Öckerö thought the early recommendations from SABO were quite bland, thus they listened to the auditor and to what FAR said in courses. Their auditors did not think their role was to make the exact choices, but rather assess

whether it was good enough or not. Öckerö thought companies would listen and learn from each other, but in the end everyone would come to a conclusion on what suited them best. NKBO worked with component accounting in the same way within their consolidation. Apart from SABOs guidance, they used FARs and compiled it to fit their business. They barely took any help from their auditors and had not had any deep discussions with them yet. Their impression was that the auditors did not know exactly how to handle component depreciation, and that the people in the real estate business knew more. When attending the SABO conference, NKBO noticed that every company had their own perception of K3 and how to handle it.

#### 4.2.2 Private real estate companies

The private companies used guidance's from SABO, Fastighetsägarna and FAR. Apart from HSB Göta, they were all satisfied that K3 was principle-based. They thought it was an advantage that it was up to companies to make own assessments, and that they at the same time could find support from the comments in the regulatory. The private companies also thought the support from auditors were initially quite weak, and that their knowledge was more theoretical than practical at the early stage, since no one in the industry made a clear statement. However, they argued that the auditors' gradually became more and believed they eventually received enough guidance.

Ivar Kjellberg developed a common course of action within the consolidation. They underlined the importance of having well-formulated and common directions to know where they were heading. In discussions with auditors and accounting consultants it was up to them to pursue questions and figure out how to deal with the new framework. They argued that the auditors' role had been more to confirm their choices. HSB Göta tried to create their own picture of the regulatory first and then to go through all the material with their auditors. Together with other HSB housing organizations they were trying to find a common approach. They also visited seminars, mostly hosted by different audit firms, and met Bo Nordlund who explained and discussed how to deal with the new requirement. HSB Göta believed that additional guidance could be a benefit for the framework. They thought vague standards could be a threat and cause problems in the future as the real estate business is very capital intensive.

Bygginvest underlined that since their business was very complex with over 100 different buildings, they sometimes got the impression that auditors were not entirely clear on how to judge their practical work. Their auditors also said they discussed some questions with industry experts. According to Bygginvests opinion, an industry practice had been formed due the guidance published by SABO and Fastighetsägarna, even if they thought it was too detailed. Svenska Hus had a meeting with their auditors in the fall of 2013 to ensure they were on the right track before they let the real estate managers distribute opening values on components. Svenska Hus also thought it was natural that assessments were individual at the start, since there was only theory available and no practice to base on. Since the real estate business is not very large in terms of number of operators, they claimed some sort of common practice would evolve.

# 4.3 Motives for accounting choices

#### 4.3.1 Municipal real estate companies

The municipal companies in the study agreed they had a responsibility to care for the housing in their areas and that they did not have the same demands for profit as private companies. However, they argued they still had to have a business approach as they took loans on the open market. Another common denominator was that the municipal companies previously deducted a lot of planned maintenance, which made it easier to control the earnings. With K3, that possibility decreased due to the demand of activation according to the general asset criteria, which would lead to an increased profit the first years after implementation. However, they claimed it would be balanced over years since increased activations also would lead to increased depreciations. The municipal companies argued they would have to explain this for the tenants' association, which could be a great challenge as they would be interested in how much maintenance was done and also in the earnings level.

Company A and Mölndalsbostäder was evaluated on yield demand. For Company A, the yield would improve since it was calculated on earnings before depreciations; thus the board would have to consider whether they wanted to recalculate it or not. Their yield targets were added in 2013; previously they only used solidity. Except for these key ratios, their evaluation was also based on consumption of energy and a custom satisfaction index. They also argued that their goal was not to top the profit list for municipal companies, but rather to have an even level of earnings with a slight increase every year as new apartments were built. They would rather be conservative and depreciate faster, but also meant that it would not be possible to inspect all properties at once to find out how long they would last. Mölndalsbostäder had a yield demand of 4% of the market value and thought it would remain on the same level despite the fact that they would actually reach that target with K3. The board had also decided that all newly produced properties should not be impaired the first seven years, despite being potentially unprofitable these years. The reason for entering K3 early was the minimal investments made in 2012, and that they had room to allocate work for an early transition. Another benefit was that the planned large investments could be handled with K3 in mind. However, they claimed they would rather use market valuation in the future.

The management in Bostadsbolaget and Familjebostäder were evaluated on budgetary targets from the parent company. A reasonable range for earnings had been discussed for the dividend to work. However, there were no specific demands on reaching certain earnings. It was more important for them to have an even net operating income, and if the level of earnings was too high maintenance was increased. Neither Familjebostäder nor Bostadsbolaget thought that room for their assessments would be narrower. The projects they would need to do would be done, and then they would deal with the effects in accounting. Öckerö previously used maintenance as an earnings regulator since they estimated how much maintenance they could afford and then deducted it. Also, if they saw that the earnings would be good, they took the opportunity to do maintenance. With K3, they thought it would be harder, but still possible to make these assessments if using good arguments. Since the net operating income would be improved and the depreciations larger when more maintenance was activated and depreciated, their yield demands for properties would have to be re-evaluated. The question of looking closer at this arose at the time of study, and since

2013, higher demands had been put on the municipal board to get a better insight into their own companies.

For NKBO, their parent company told them they could basically do as they wanted with component accounting. They were evaluated on yield demands and solidity and thought these targets and demands were expected to change since the balance sheet increased with K3. However, they still thought there would be room to make their own assessments. For example, when windows were changed on just one gavel of a house, the question arose if that was a change of component or should be directly deducted as an expense. In these cases, NKBO thought they could make assessments themselves as long as they were consistent.

#### 4.3.2 Private real estate companies

For the private companies it was also clear that overall depreciations would increase. However, it was more important for them to adapt their accounting and activate more in order to keep a steady income and increase their profit. The private companies also claimed their goal was not to be best at the K3 regulatory, since they had a profit maximizing purpose. They thought there was less room for discretion, especially for the choice between activation and deduction of maintenance.

Ivar Kjellberg argued their owners were mostly focused on the yields of properties and the overall profit after financial items. These measurements were affected by K3 and had been taken into consideration since they would do some sort of translation table to facilitate the comparison. Previously, most costs were deducted as an expense directly, but K3 forced them to make more strategic assessments to activate parts that would remain for a larger part of the buildings' lifetime. For HSB Göta, it was important that their business operations were maintained and not largely affected by K3 since they were an incorporated association. They were measured particularly on turnover, which was put on the budgetary targets. The owners were aware of the K3 introduction but not in details, thus they continued to put the same profit requirements. HSB Göta claimed that no one would be likely to show negative results just because their components had too short using periods; the industry would probably adapt to what was reasonable.

Bygginvest emphasized they wanted to achieve a clean audit report and underlined that it was very important for them to provide a good yield for their owners. They thought the municipal companies may have "a bigger suit" and more resources to handle component depreciation and that their owners were more interested in reported earnings, the balance sheet, and possibly how much money was put in the bank. With this in mind, K3 was completely uninteresting for the owners and their requirements would not change; they still wanted to see satisfactory results. Bygginvest also believed that owners of a private company always have quite a good insight into the company's economy as they often came to get monthly reports. Since the room for discretion was much less in K3, they thought everything was very theoretical, and in some areas they had tough discussions with their auditors, for example, when it came to the assessment of whether to activate painting work or not. With these factors in mind, they thought it would be better to focus more on a market-oriented assessment. Svenska Hus were evaluated on yield demands to increase the substance. They argued the room for discretion had decreased from a theoretical point of view, but the level for accounted earnings had increased since they could decide on the depreciation rate.

Some of their bank contracts included demands for reaching certain key ratios that had to be adjusted to be consistent with the accounting. However, they argued that increased depreciations would not affect the risk of their properties.

#### 4.3.3 Companies choosing between K2 and K3

Öckerö did not fall under the criteria of being a larger company, thus it was not mandatory for them to prepare their accounting according to K3. However, they thought K2 did not take into consideration any other stakeholder than the tax authorities, thus it would not provide a true and fair view with these simplified rules. For instance, they said it was not possible for them to use deferred taxes, which occurred when tax depreciations were made faster than accounted depreciations. Since Öckerö also claimed they were a growing company, they would probably exceed the limit and become a large company in a few years. Thus, when the company structure was divided into a consolidation, they also changed the business system, property system and implemented K3. They thought it could be a lot of work with no direct use for a small company, but also that the extra work and problems with component accounting were exaggerated.

Alexanderssons was a small private real estate company interviewed that chose to prepare their accounting according to K2. They thought the greatest downside with K2 was that it did not provide a completely true and fair view of their annual report. However, they argued that the point of providing a true and fair view was for their stakeholder's sake. For Alexanderssons, that would be the bank, but since they thought K2 was a good choice, the company saw no reason to use something else. The auditors also argued for K2 at the time. The CFO had read a lot of articles and visited seminars regarding K3, and thought it sounded difficult. With this in mind, it was a relief when the auditors and banks also thought K2 was better. Alexanderssons also said they preferred to deduct expenses directly and have low book values on their properties. It was also important for them that the tax accounting was closely connected to the regular accounting. The owners were well informed about daily work. However, they did not put a lot of effort in finding out the differences between K2 and K3, but rather put their trust in the auditor's knowledge and what the CFO had learnt in courses.

# 5. Analysis

In the analysis section, the empirics are analyzed based on the theories and previous research from the frame of reference.

# 5.1 How do companies' accountants make choices for component depreciation?

Consistent with Lind & Hellström's (2011); Lind & Bejrum (2002); Colyvas (2009) the implementation of K3 imposed large administrative burdens on all the companies. They had to divide tangible assets into components, decide their using periods and which costs should be activated or deducted. According to Colyvas (2009), the work with implementing component depreciation is supposed to be made in due time to avoid big complications. In the study, the municipal companies, in particular, could be considered to have done this. Bostadsbolaget and Familjebostäder were early enough to inspire SABO in their recommendations, and Mölndalsbostäder started one year ahead of the others with component accounting and were able to consult other companies on how to handle the implementation. For the private companies, the process started later. For instance, HSB Göta had not fully decided upon the exact amount of components, and Ivar Kjellberg had not made complete decisions regarding using periods of newer buildings.

The work with dividing buildings into components was made in close cooperation with the real estate engineers in all companies, consistent with the given recommendations (SABO, 2013, FAR 2013, PWC 2012). Mölndalsbostäder and Öckerö also used external consultants to help them in deciding components and using periods. For the division of components, the municipal companies tended to have a more detailed division than the private companies, consistent with Edlund & Skoglöv (2006); Forster et al (2006). The municipal companies detailed component classification and resource-intensive work with component depreciation concluded principle-based standards gave room for management's own interpretations and that their accountants strived to present the transactions as good as possible in the financial reports (Maines et al 2003; EFRAG, 2005). This might in turn correspond to Wyatt (2008); Folsom et all (2011) findings that principle-based rules work better than detailed rules and gives an increased relevance for the reader.

The municipal companies approach to achieve a correspondence with planned maintenance might also indicate a better accounting strategy compared to previous performance increasing method that led to underestimation of earnings (Hellman et al, 2011; Lind & Bejrum, 2002). This approach also matched Lind & Bejrum's (2002) findings that component depreciation would lead to a clearer handling of maintenance and repairs. However, due to the lack of guidance, it was sometimes hard to draw a clear line between investments and maintenance, specifically emphasized by Company A, NKBO and Öckerö. For the private companies, more general assessments and standardizations were made to suit their particular business and housing plans. For instance, Bygginvest did not plan any individual assessments of properties; they rather divided them into three or four groups based on value year as they argued it was unreasonable to hire people just for extra work. These differences could be connected to the differences in ownerships structure, and that managers thereby utilize the discretion in the principle-based framework differently depending on how they want to convey information to their investors (Folsom et all, 2011). Some kind of standardization was made in all companies to make the accounting more manageable, but the private companies tended to use standardization to a greater extent. According to Lind & Bejrum (2002), this standardization gives a misleading view of the economic reality as well as making it harder to compare companies. The empirical findings indicated the comparability would be worsened by K3 since all companies handled it differently and made their own interpretations. This was consistent with Baily & Sawers, (2012) outcomes that a principle-based framework decreases the comparability, and further emphasizes that a rule-based framework better guarantees comparability and consistent application between companies and over time (Maines et al 2003, Burgemeestre et al 2009).

According to Ejermark (1997); Folke & Nordlund (1999) component depreciation will overcome the previous long deprecation times. This goal seemed to have been reached to some extent with K3 and might show that component depreciation was needed. The companies increased their total depreciation rate as a result of a more detailed division of buildings. For the body, a using period of 100 years was still common, but for other components lower usage periods were used. Bostadsbolaget and Familjebostäder made an exception since their average depreciation period increased from 50 to 50.5 years as a result of their previously high depreciation rate. According to Lind & Hellström, (2011) maintenance actions made in certain contexts can vary and be accounted for in different ways, as there are no exact boundaries for when costs should be activated. This was confirmed by the results from the empirics since the companies had different approaches to decide what should be activated or deducted. Mölndalsbostäder had a project approach to when maintenance should be activated. HSB Göta would probably consider the performance increasing method since they thought it was hard to set monetary limits for activation, consistent with the recommendations from PWC (2013). Folke & Nordlund (1999) emphasize the need for component depreciation since they find deficiencies in how real estate companies reported their maintenance cost versus the actual spending requirements. This seemed to be more consistent with how the municipal companies previously acted, as they were more conservative with balancing costs, resulting in more activation with K3. The findings also indicated that the question whether to activate or deduct could be company-specific, depending on the kind and age of properties. Öckerö stood out with their large degree of small maintenance work in form of up-shaping actions that were too small to be a change of component.

According to Colyvas et al (2009); Nordlund et al (2013); FAR (2013), updated facility registers are important in the handling of component accounting as the old structure is often not compatible with the management of accounting and tax earnings. This was consistent with the empirical findings, since all companies claimed that higher requirements would be put on accounting systems and that K3 led to greater differences between accounting and tax, resulting in an increased administrative burden in separating the effects of different actions. However, the taxable accounting would not change and depreciations were still important for tax reasons, consistent with Stark (1994); Enström & Matos (2000). Similar to Lind & Bejrum (2002) all companies claimed that it required clear procedures to allocate costs to each specific component and to decide if impairments were necessary or not. The study indicated that the municipal companies had come further than the private companies in updating their facility registers, which could be a potential affect of different accounting motives and ownerships structures.

Lind & Hellström (2011); Starova & Cermakova (2010); Colyvas (2009) claim that component depreciation will result in financial reports which better reflect the economical reality, providing a more true and fair view of the accounting as well as being a tool for budgeting and resource planning. The companies agreed that component depreciation theoretically gave a more fair way of assessing the depreciation of buildings, and that it could be interesting to see a history of what had been done in the properties over years. But especially the private companies questioned the potential benefits and advantages. They meant that potential buyers were rather focused on the market value and market return. Consistent with Lind & Hellström (2011) findings, the municipal companies, on the other hand, saw an advantage with the increased periodization of maintenance as they did not get large fluctuations in earnings and did not have to make adjustments for large maintenance projects. For instance, Company A argued the greatest advantage with K3 was that they did not become dependent on years with planned maintenance. Mölndalsbostäder also saw it as a benefit that their early transition made it possible to plan large investments with K3 in mind.

# 5.2 Which impact do industry organizations, auditors and expert guidance's have on the component accounting?

When putting together the empirical findings, it became clear that the studied companies had a lot of reflections on which factors were influential in the work with component depreciation. Similar to Trombley (1989), Schipper (2003) and Hellman et al's (2011) findings that the implementation of a new standard requires guidance from someone else than the standard setter, the study showed that companies sought guidance from industry organizations. In particular, they used guidance published by SABO, FAR and Fastighetsägarna, of which the most frequently used was SABOs division of components. Schipper's (2003) statement that companies develop their own guidelines and standards when guidance is not available in the framework appeared to be true, especially for the companies that were part of a consolidation. In the consolidation, they worked jointly to develop a common framework to ease the accounting and consolidated reporting. They found benefits in supporting each other by having someone to discuss with, and that the common course of action made it harder for auditors to reject their accounting choices. The independent companies listened and learned from others, but in the end came to their own conclusion on what suited them best. This was consistent with Colyvas (2009); Grönlund et al (2002); Maines et al (2003) that the assessment of using periods can be based on experience from companies with similar assets.

Maines et al (2003); Burgemeestre et al (2009); EFRAG (2005) conclude that it is important that the accountant is equipped with guidance complementing a principlebased framework. The empirics showed that the municipal companies and HSB Göta did not think they had access to such guidance in due time and that they initially would have appreciated more guidance with more detailed component plans. Most questions arose when companies started to work with the framework; thus it seemed to be of great importance to have guidance well ahead of implementation. The private companies except for HSB Göta thought the initial guidance and the one developed since was sufficient to prepare their accounting. They saw it as an advantage that rules were principle-based, as it was up to companies to make their own assessments. Since they did not see any particular usefulness with the new framework, they were not interested in an early adaption but rather had the approach that it was something they had to do. This was the complete opposite to Mölndalsbostäder, Bostadsbolaget and Familjebostäder who developed guidelines well ahead of transition.

According to Jamal & Tan (2010); Tweedie (2002); Ball et al (2003) the auditor's role is of great importance when using a principle-based framework. They further claim the importance of a principle-oriented mind-set from the auditors for the framework to reach its full potential. Based on the interviews, it was obvious that this was initially not consistent with the empirical findings. All companies thought the auditors' support was weak at an early stage, and they showed uncertainty as neither the industry nor the regulatory made any clear statements. Even if the study's findings showed that auditors were eventually a bit more specific in how companies could proceed, it seemed they did not give clear answers on specific questions, thus it was up to each company to individually pursue questions and figure out how to deal with the new framework. This, on the other hand, indicated that the auditors seemed to have a principle-oriented approach since they did not make the exact choices, but rather assessed if the actions were consistent with the demand for a true and fair view.

Since all respondents prepared their accounting individually or commonly within a consolidation and used the available guidance's in different ways, this led to an increased demand on auditors to assess a large spectrum of accounting choices, consistent with Carmona & Trombetta (2008). On the other hand, the study did not confirm the findings of Healy & Palepu (2001); that auditors would add a new service with a more complete audit report. This was due to insecurity in the real estate business on how to handle component deprecation. However, experts in the field of real estate accounting had the opportunity to provide companies with consulting in how to handle difficult boundary issues, which was mentioned by both HSB Göta and Bygginvest. Furthermore, Healy & Palepu's (2001) findings that a principle-based framework would result in increased harmonization due to common interpretations were not entirely supported. The companies did not tend to get closer to each other in how they accounted for components, but rather adapted it to their specific business. On the other hand, they all used the guidance published by SABO, which could be seen as a common practice partly in place, but not a complete harmonization. Consistent with Healy & Palepu (2001) the consolidated companies had come further in the harmonization process, due to their common accounting methods. For the reporting of economic substance mentioned by Agoglia et al (2011), there seemed to be a difference between the two ownership structures in that municipal companies tended to have a larger focus on this, using a more detailed component accounting consistent with the opinions of regulators. The private companies, on the other hand, rather strived to simplify and make more standardizations.

#### 5.3 How are the accounting choices shaped by the ownership structure?

Jeanjean & Stolowy (2008); Callao & Jarne's (2010) findings indicate that the discretion for accounting choices increases with the implementation of a principlebased framework. All companies, except for Bostadsbolaget and Familjebostäder, claimed K3 decreased the room for discretion. For instance, Öckerö used maintenance as an earnings regulator but thought this would be harder with K3, even though it would be possible to make assessments if using good arguments. This finding might be due to the previous framework also being principle-based which possibly gave the management more discretion for accounting choices. Especially maintenance could be seen as an area used depending on different accounting motives (Lind & Bejrum, 2002; Stark, 1994). Historically, with the performance increasing approach, real estate companies used activation and deduction of expenses to reach desired earnings. The municipal and private companies used these instruments in different ways. Municipal companies deducted a lot of planned maintenance, while private companies were more focused on reaching their earnings targets by either activating or deducting. This finding is consistent with Weil (2009); Ronen & Yaari (2008); Lambert (1984) that management can use accounting methods such as activating or deducting expenses for maintenance and repairs to affect how external parties perceive their condition, or to decrease the variability in the company's total value. Lind & Bejrum (2002) give an example of how the discretion can be utilized by using good earnings to build a future buffer. This was seen in the municipal companies since they argued the initial increased earnings related to K3 would be caught up by the increased depreciations emerging from activations.

According to Clarkson et al (2011) the implementation of a principle-based framework improves the compatibility and reporting quality. As mentioned earlier, all respondents agreed K3 would lead to a more true and fair view, but since the companies had different accounting motives based on their ownership structure, the comparability did not increase at an early stage, consistent with Baily & Sawers, (2012). However, Svenska Hus argued that since the real estate industry was highly concentrated, they thought some sort of common practice would evolve.

While the municipal companies spent a lot of resources on handling the demand for component depreciation in best possible way, the private companies claimed they would use standardization to a greater extent. They did not plan to make an equally detailed component division and also would avoid hiring extra personal for handling the increased administrative burden. A possible explanation for the differences between private and municipal companies in their handling and different attitudes towards the new regulatory could be derived from the PAT (Watts & Zimmerman, 1978, 1986, 1990; Healy, 1985). Both ownership structures were perceived as highly concentrated, since the municipal companies only had one owner, the municipality, while the private companies only had a few owners. However, in the private companies, the cooperation between owners and management were closer than in the municipal companies, which led to lower demands on the accounting of components consistent with Nilsson (2002); Jensen & Meckling (1976); Stark (1994). It was more important for the private companies to not change accounting principles just because of K3, thus their goal was not to be the best at the new framework, consistent with Ball et al (2003). They wanted to maintain satisfactory yields for their owners according to their profit-maximizing purpose and could not afford negative earnings. Since the municipal companies' profit accrued to the municipality in terms of new housing, and that their value transfers were limited, they did not have the same profit maximizing purpose, consistent with Brorström et al (2000); Stark (1994). In this way, the municipal companies had a "bigger suit" to handle the increased administrative work, which was reflected on attitudes, time-effort and how much resources they spent. This shows that the companies' ownership structures had consequences for how they handled component depreciation. It also indicated that the managers' discretion was different between companies depending on costs and advantages with the restrictions (Watts & Zimmerman, 1990).

According to the hypothesis of political cost in PAT, large companies rather than small are more likely to use accounting choices that reduce reported profits (Watts & Zimmerman, 1986, 1990). Historically, the municipal companies seemed to have used accounting choices to reduce their earnings, but the study indicated they do not have the same possibilities anymore, due to the removal of the performance increasing method. However, all companies adapted to K3 with respect taken to their individual business plan, which is consistent with Zmijewski & Hagerman's (1981) finding that companies choose an overall income strategy, of which individual accounting choices are a part. Dhaliwal et al's (1982) finding that management controlled companies are more likely than owner-controlled companies to use income-increasing accounting methods was not supported by the study, since the private companies used this method to a greater extent than the municipal companies.

Consistent with Watts & Zimmerman, (1978, 1986, 1990); Copley & Doucet, (1993), the study also showed that companies' different approaches towards K3 could be an affect of differences in their principal-agent relationships. The most important user of the financial information for the municipal companies was the tenant's association, while private companies cared most about their owners. For municipal companies, this led to them being more focused on adapting to the new standard rather than satisfying their owners, the municipality. While the main challenge for the municipal companies was to explain for the tenant's association why the earnings were improved and that they should not affect the rent levels, the challenge for private companies was rather to sustain their key ratios and be focused on their owners' interest by reaching satisfactory earnings and dividend. According to Watts & Zimmerman, (1978, 1986, 1990); Copley & Doucet, (1993) there is larger agency problem in a bigger company or municipality. This was not supported by our findings since the potential agency problem appeared to be greater in Öckerö and NKBO, who were smaller than the other municipal companies in the study. Their municipal boards did not evaluate their earnings targets very thoroughly. For instance, NKBOs parent company told them they could do as they wanted with component accounting, and Öckerö claimed it was not until just recently that higher demands had been put on the municipal board to get better insight in their own companies.

Another factor showing the differences in ownership structures between private and municipal companies was how the two types of companies categorized as small, reasoned in their choice between K2 and K3. For Öckerö, they chose to account according to K3 since they thought K2 did not provide a true and fair view, and that they might become a large company in the future. With the municipality as the owner, they did not have a strict profit-purpose, and could bear the increased costs connected to K3 with the resources the municipality provided. Alexanderssons, on the other hand, chose to account according to K2 since the bank, the auditors and the owners saw no reason to use something else. They emphasized that the point of providing a true and fair view was for the stakeholder's sake. These findings indicated that the ownership structure had an impact on how the accounting was handled (Watts & Zimmerman 1978, 1986, 1990; Stark, 1994)

# 6. Conclusion

The conclusion answers the main research question with support from the identified sub-questions, and also specifies the contribution of the study. Furthermore, own reflections are presented as well as suggestions for future research in the field.

## 6.1 Results of the research question

**6.1.1 How do companies' accountants make choices for component depreciation?** The implementation of K3 imposed large administrative burdens on all companies. The handling of the new framework required close cooperation between the companies' economy departments and the real estate engineers. The municipal companies started their work with K3 earlier than the private companies, who were still not completely done. Another difference was that the private companies made more standardizations and simplifications than the municipal companies, who made more detailed component plans and individual assessments. The municipal companies wanted the division of components to be of practical relevance and corresponding with planned maintenance. Some of them even created specific employments and used external consultants for a better adaptation. The new demand for component depreciation increased the municipal companies overall depreciations, except for Bostadsbolaget and Familjebostäder.

The study showed K3 resulted in increased activations of additional costs for all companies to some extent. Previously, the municipal companies were more conservative with balancing costs than private companies, which resulted in a higher degree of activation for them with K3. However, the study showed that since there were no exact boundaries for when costs should be activated, companies had different models for this, such as percentage rates, monetary limits or project recognitions. K3 resulted in greater differences between accounted earnings and tax earnings, which imposed higher requirements on the companies' facility registers, and that they had to develop separate registers for tax. The municipal companies had come further than the private companies in the process of updating their facility registers. All companies thought the new framework would lead to a more true and fair view to some extent. The municipal companies thought it would provide better information to the users of the annual report, while the private companies had a more negative attitude since they saw no direct use for the primary users of the financial reports.

# 6.1.2 Which impacts do industry organizations, auditors and expert guidance's have on the component accounting?

The implementation of K3 required guidance from someone else than the standard setter. The companies used guidance published by the industry organizations SABO, FAR and Fastighetsägarna, of which the most frequently used was SABOs guidance. Some of the municipal companies that made preparations well ahead of the framework change made their own policies, since there was no guidance available initially. The private companies were not interested in an early adoption as they had the approach that K3 was something they had to do. While the private companies that the rules were principle-based, the municipal companies would have appreciated to have more detailed guidance for their component plans. They also argued for more statements from guiding authorities coming in due time.

The study showed that all companies developed own guidelines and standards for the principle-based framework. The independent companies listened and learned from others, but in the end they came to own conclusions on what suited them best. The consolidated companies worked jointly to develop a common practice and found benefits in supporting each other, which made it harder for the auditors to reject their accounting choices.

All companies agreed the auditors' support was initially weak as their knowledge was rather theoretical than practical. The private companies argued that the auditors' knowledge had gradually developed. However, all agreed that auditors still did not give clear answers on specific questions, thus they had to individually figure out how to deal with specific actions. Auditors seemed to have a principle-oriented mindset since they assessed the companies' choices rather than giving them specific advice. Since all companies used available guidance's in different ways, it also put increased demands on auditors to assess a large spectrum of accounting choices. As the companies adapted the principle-based accounting to their specific business, the study showed that K3 did not initially increase the harmonization within the industry. However, some sort of harmonization could be seen in that all companies used guidance's from the same industry organizations.

#### 6.1.3 How are the accounting choices shaped by the ownership structure?

The study showed that the ownership structure and the reporting incentives related to it had a significant role in companies' accounting choices. This had an effect on how much time and costs municipal and private companies put on the new framework. The municipal companies had a "bigger suit" and spent more resources on handling the demand for component depreciation in the best possible way, while the private companies used more standardization and did not strive to be the best at K3 adaptation. The study indicated that the differences in handling and attitude towards K3 could be an effect of their different ownership structures. In the private companies, the cooperation between owners and management were closer than in the municipal companies, and the owners did not have high demands on the accounting of components. While the municipal companies had a business approach based on the municipality's housing plans, the private companies were profit-maximizing and strived to produce a satisfactory yield for their owners.

The study also showed that the room for discretion decreased with K3, and that the municipal companies were more likely than the private companies to use their initial increased earnings to build future buffers. The principal-agent relationship in the companies also affected their approaches towards K3. The municipal companies were more focused on adapting to the new standard and satisfy the municipality. The private companies focused on the owners' interests, and were therefore more likely to use standardized accounting to reach satisfactory earnings and dividend. A potential agency problem appeared especially in the relatively small municipal companies studied, since their municipal board did not evaluate their earnings targets very thoroughly.

An additional finding was that the reporting incentives in two small companies with different ownership structures resulted in different choices between K2 and K3. The municipal real estate company chose to account according to K3 since they thought K2 did not provide a true and fair view, and had more resources from the municipality

to bear the increased costs. The private real estate company, on the other hand, chose to account according to K2 since the bank, the auditors and the owners saw no reason to use something else.

## 6.2 The contribution of the study

The study's contribution is described in terms of a practical relevance for the real estate business. It gives an overall description of the handling of component depreciation and that companies address the new demand differently, depending on ownership structure and size of business. Since the study is based on a company's perspective, it also provides a feedback to the standard setter. Potential deficiencies such as insufficient initial guidance, insufficient knowledge from auditors and decreased comparability that need to be addressed are detected by exploring companies' attitudes and approaches to the principle-based framework.

## 6.3 Own reflections

In the study, we saw that companies handled the demand for component depreciation differently depending on their aims of business and the resources available. During the process, we noticed that private companies were more prone to use maintenance as an investment. The municipal companies did not want to present too good earnings, thus they would not have the same budget next year. With this in mind, the increased activation within K3 might be a potential problem for the municipal companies with low book values on their properties. They could get bloated balance sheets ending up too close to the market value, resulting in an increased need for impairments. Some companies might also see K3 as an opportunity to renovate their million programs, since it could all be activated. In a worst-case scenario, this could have devastating effects, as activation is an accounting technical detail not resulting in more liquidity. We also think that within a few years, there will be some sort of common practice for K3 in place. This was the case when listed companies transferred to IFRS, and some normalization of the accounting is often developed eventually. However, since the study indicated that the handling of K3 and the effects of component accounting also depended on the age and kind of properties, it is possible there will be differences in common practice depending on the size of the property population. We think that K3 could lead to a more true and fair view since it is principle-based, but it is also important to take into account the extent to which this provides increased usefulness, especially for private companies. It is probably more up to the reader and companies as informers to illustrate which numbers and measures that are most relevant for their specific business.

## 6.4 Suggestions for further research

The study showed that there were differences in how companies accounted for component deprecation, depending on both the ownerships structure and size of business. Therefore, it would be interesting to make a follow-up study within a few years to see if companies still have different approaches, or if some common practice has developed. It would also be interesting to make a quantitative study when the first annual reports have been published, to see the final effects of K3 implementation and if some common patterns could be found in the real estate business. Optionally, a follow-up study could be made to further investigate the potential effects of increased activations, and if it would call for additional needs of impairments.

# 7. Bibliography

## 7.1 Published sources

#### 7.1.1 Articles

Agoglia, C.P., Doupnik, T.S., Tsakumis, G.T. (2011) *Principles-Based versus Rules-Based Accounting Standards: The Influence of Standard Precision and Audit Committee Strength on Financial Reporting Decisions.* The Accounting Review 86:3, 747-767

Ball, R., Robin, A., & Wu, J. (2003). *Incentives versus standards: Properties of accounting income in four East Asian countries*. Journal of Accounting and Economics, 36 (1–3), 235–270.

Bailey, W., & Sawers, K. (2011) In GAAP We Trust: Examining How Trust Influences Nonprofessional Investor Decisions Under Rules-Based and Principles-Based Standards. Behavioral Research in Accounting, Vol. 24, No. 1, pp. 25-46.

BFN (Bokföringsnämnden) (2013); "Bokföringsnämndens allmänna råd, BFNAR 2013:2", http://www.bfn.se/aktuellt/aktuelltredovisning.aspx

Boverket, Begränsning av värdeöverföringar. http://www.boverket.se/Boende/Kommunernasbostadsforsorjning/Allmannyttan/Definition-och-skalig-utdelning/.

Brorström, B, Falkman, P, Haglund, A & Lagebro, A (2000). Förutsättningar för kommunal redovisning och finansiell bedömning – en idéskrift om innebörden och konsekvensen av kommunal särart. Rådet för kommunal redovisning.

Burgemeestre, B., Hulstijn, J. & Tan, Y-H. (2009). *Rule-based versus Principle-based Regulatory Compliance*. Jurix.

Callao, S., & Jarne, J. I. (2010). *Have IFRS Affected Earnings Management in the European Union?* Accounting in Europe, 7 (2), 159-189

Carmona, T. & Trombetta, M (2008). *On the Global Acceptance of IAS/IFRS Accounting Standards: The Logic and Implications of the Principles-Based System,* Journal of Accounting and Public Policy, Vol. 27, No. 6.

Colyvas, A. (2009). *Overhauling your fixed assets register*. Accountancy SA, June 2009, 26-29

Clarkson, P (2011). *The Impact of IFRS Adoption on the Value Relevance of Book Value and Earnings*, Journal of Contemporary Accounting and Economics, Forthcoming.

Copley, P. & Doucet, M. (1993). The impact of competition on the quality of governmental audits. *Auditing Sarasota*, 12 (1), 88.

Dhaliwal, D. S., Salamon, G., & Smith, E. (1982). *The effect of owner versus management control on the choice of accounting methods*. Journal of Accounting and Economics, 4, 41-53.

Deloitte (2012) K3- Nya redovisningsregler från bokföringsnämnden http://www.deloitte.com/assets/Dcom-Sweden/Local%20Assets/Documents/K3%20-%20Nya%20redovisningsregler%20från%20Bokföringsnämnden%20-%20SB.pdf

Edlund, A. & Skoglöv, S. (2006). *Nya avskrivningsregler i IFRS - ger komponentavskrivning en mer rättvisande bild av periodisering av kostnader?* 

EFRAG (European Financial Reporting Advisory Group) (2005). "Achieving Consistent Application of IFRS in the EU" A discussion paper, www.efgrag.com.

Ejermark, Anders. (1997) *PM – Vanliga betydelsefulla fel på byggnader: Flerbostadshus*. Stockholm.

Enström A. & Matos R. (2000). *Gränsdragning mellan investeringar och underhållskostnader inom fastighetsbranschen*. Uppsats, Företagsekonomiska Institutionen, Stockholms Universitet.

EY (2013). *Komponentavskrivning, hur gör man?* http://www.skl.se/BinaryLoader.axd?OwnerID=cfd577f4-6860-4920-8bec-2bccfdac069d&OwnerType=0&PropertyName=EmbeddedImg\_ec659738-c2b9-47fd-9488-33907d351b8d&FileName=Bokdag2013-Komponentavskrivningar.pdf&Attachment=False

FAR (2013). *RedU 13 - Övergång till komponentmetod - fastigheter* http://www.far.se/PageFiles/12152/RedU%2013%20Overgang%20till%20komponent metod\_fastigheter.pdf

Folke, A. & Nordlund, B., (1999), Värderings- och redovisningsproblem i fastighetsföretag. Karlstads Universitet, Karlstad.

Folsom, D., Hribar, P., Mergenthaler, R., Peterson, K. (2011). *Principles-based* standards and the informativeness of earnings. Working paper, 2.

Forster R, Olsson, M. & Stockhem, S. (2006). *Komponentavskrivningar – en del om en del.* 

Hellman, N., Nordlund, B., Pramhäll, C. (2011). Förbättrad redovisning med komponentansats: Nyttan överstiger kostnaderna. Balans, Nr 12.

Healy, P. (1985) *The effects of bonus schemes on accounting decisions*. Journal of Accounting and Economics 7 85-107. North-Holland

Healy, P & Palepu, K. (2001). *Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature*. Journal of Accounting and Economics 31 405–440

Jamal, K. & Tan, H-T. (2010). *Joint Effects of Principles-Based versus Rules-Based Standards and Auditor Type in Constraining Financial Managers' Aggressive Reporting*. The Accounting Review, American Accounting Association Vol. 85, No. 4.

Jensen, M.C. & Meckling, W.H. (1976). *Theory of the firm: managerial behavior, agency costs and ownership structure*, Journal of Financial Economics, Volume 3, No 4, pp. 305-360.

Keating, A.S. & Zimmerman, J.L. (2000). *Depreciation-policy changes: tax, earnings management, and investment opportunity incentives*. Journal of Accounting and Economics. Vol. 28, pp. 359-389.

Lind, H. & Hellström, A. *Hur ett affärsmässigt bostadsföretag agerar*. Stockholm: Institutionen för Fastigheter och Byggande Avdelningen för Bygg- och fastighetsekonomi

Lind, H. & Hellström, A. (2011). *Komponentavskrivning i kommuner och landsting*. Sveriges Kommuner och Landsting.

Lundström, S. & Nordlund, B. (2012). *Debatten om byggnadsavskrivning får ny näring*. Fastighetsnytt nr. 6

Lambert, R.A. (1984). *Income smoothing as rational equilibrium behavior*. The Accounting Review, 59, 4 (October): 604–618.

Maines, L.A. et al. (2003). *Evaluating Concepts-Based vs. Rules-Based Approaches to Standard Setting*. Accounting Horizons. (March 2003, Vol. 17, No. 1 p. 73-89)

Nordlund, B. (2010) Rapport: *Avskrivningstider för byggnader (bostäder och kontor)*. Fastigetsägarna Sverige.

Nordlund, B. & Lundqvist, P. (2010). *Byggnadsavskrivning och svenska redovisningsregler*. Balans, Nr 10, 2010.

Nordlund, B., Pramhäll, C. & Drefeldt, C. (2013). *Hur kan en fastighet delas upp i komponenter vid övergången till K3?* Balans nr. 3 2013, 32-35

Phillips, J.D., Pincus M., Rego S.O. & Wan, H. (2004). *Decomposing changes in deferred tax assets and liabilities to isolate earnings management activities*. The Journal of the American Taxation Association, 26 (Supplement): 43–66.

SABO (2012) *Riktlinjer för komponentredovisning i förvaltningsfastigheter*, http://www.sabo.se/kunskapsomraden/ekonomi\_och\_finans/komponentredovisning/P ublishingImages/Riktlinjer%20för%20komponentredovisning.pdf

Schipper, K. (2003). *Principles-Based Accounting Standards*. Accounting Horizons. (March 2003, Vol. 17 Issue 1, p61-72. 12p.)

Stárová, M. & Čermáková, H. (2010). *Method of Component Depreciation of Fixed Assets and Its Comparison with Traditional Methods*. AGRIS on-line Papers in Economics and Informatic, vol. 2:3, 37-46.

Svensk Fastighetsmarknad, (2013). http://www.svenskfastighetsmarknad.se/2013-1/ny-vardag-for-de-allmannyttigabostadsbolagen/

Trombley, M. A. (1989); Accounting Method Choice in the Software Industry: Characteristics of Firms Electing Early Adoption of SFAS No 86. The Accounting Review, vol LXIV/3, pp 529-538.

Tweedie, D. (2002); *Testimony before the U.S. Senate Committee on Banking, Housing and Urban Affairs.* February 14. Washington, D.C.: Government Printing Office.

Watts, R.L. & Zimmerman, J.L. (1978). *Towards a Positive Theory of the Determination of Accounting Standards*. The Accounting Review, Vol. 53, No. 1, pp. 112-134

Wyatt, A. (2008); "*What Financial and Non -Financial Information on Intangibles is Value-Relevant? A Review of the Evidence*". Accounting and Business Research, vol 38, no 3, pp 217 - 256.

Weil, R.L. (2009). *Quality Of Earnings And Earnings Management - A Primer for Audit Committee* Members:

http://www.aicpa.org/ForThePublic/AuditCommitteeEffectiveness/AuditCommitteeB rief/DownloadableDocuments/Audit\_Committee\_Quality\_of\_Earnings.pdf

Zimmerman, J.L. & Watts, R.L. (1990). *Positive Accounting Theory: A Ten Year Perspective*. The Accounting Review vol. 65, No. 1 (Jan., 1990), pp. 131-156

Zmijewski, M.E. & Hagerman, R. (1981). *An income strategy approach to the positive theory of accounting standard setting/choice*, Journal of Accounting and Economics 3, 129-149.

#### 7.1.2 Books

Bryman, A. & Bell, E. (2005). *Företagsekonomiska forskningsgrunder*, first edition, Malmö: Liber

Bryman, A. & Bell, E. (2011). *Business research methods,* third edition, London: Oxford University Press

Denscombe, M. (2009). Forskningshandboken: För småskaliga forskningsprojekt inom samhällsvetenskaperna, second edition, Lund: Studentlitteratur.

Grönlund, A. et al (2005). Principbaserad redovisning. Stockholm: Studentlitteratur

Holmström, N. (2003). Redovisning.nu. Malmö: Liber AB

Lind, H. & Bejrum, H. (2002). Nya principer för avskrivning - En strategi för "rätt" bokfört värde på offentliga fastigheter. Nacka: Repro8.

Lind, H. & Hellström, A. (2011). *Komponentavskrivning i kommuner och landsting*. Stockholm: Sveriges Kommuner och Landsting

Marton, J. et al (2013). *IFRS - I teori och praktik*, third edition. Stockholm: Sanoma Utbildning AB

Nilsson, S. (2002). Redovisningens normer och normbildare. Lund: Studentlitteratur.

Patel, R. & Davidsson, B. (2011). *Forskningsmetodikens grunder: Att planera, genomföra och rapportera en undersökning,* fourth edition. Lund: Studentlitteratur.

PriceWaterhouseCoopers i Sverige AB (2012). *K3 i praktiken - PwCs handbok vid tillämpning av K3*. Stockholm: Studentlitteratur.

Smith, D. (2006). Redovisningens språk. Lund: Studentlitteratur AB

Watts, R.L. & Zimmerman, J.L. (1986), *Positive Accounting Theory*. Prentice-Hall Inc.

Ronen, J. & Yaari, V. (2008). Earnings Management: Emerging Insights in Theory, Practice, and Research. New York: Springer

Stark, A. (1994). Avskrivningar, om anläggningstillgångar med ett långt liv. Byggforskningsrådet.

#### 7.2 Regulatories

Årsredovisningslag (1995:1554)

BFNAR: 2012:1 (K3)

BFNAR 2008:1 (K2)

#### 7:3 Interviews

Company A: Personal interview, 2014-03-07 Bostadsbolaget: Personal interview, 2014-03-21 Familjebostäder: Personal interview, 2014-04-01 Mölndalsbostäder: Personal interview, 2014-03-27 Öckerö: Personal interview, 2014-03-24 NKBO: Personal interview, 2014-03-28 Ivar Kjellberg: Personal interview, 2014-03-20 HSB Göta: Personal interview, 2014-03-24 Bygginvest: Personal interview, 2014-03-28 Svenska Hus: Personal interview, 2014-04-14 Alexanderssons: Personal interview, 2014-04-02

# 8. Appendix

# Questionnaire

### Part 1, practical handling of component depreciation

How did you depreciate your properties before K3? How do you handle the new requirement for component depreciation?

What does your division of components look like? How do you decide the using periods and rate of depreciation?

How do you decide which costs should be activated as an investment or directly deducted as maintenance? To what extent have you activated maintenance before? Will this change with the new demand for component depreciation?

Do you use standards for component depreciation and if so, which are the reasons for that?

To what extent does the introduction of K3 put higher demands on you facility register? What did your registers look like before? Has there been any change?

Which are the greatest pros and cons you see in component depreciation? What is the toughest challenge with the new accounting method?

### Part 2, guidance's

To what extent have you used different kinds of guidance's? Do you think the available guidance is sufficient? In what way has it helped you in the accounting? If it is not sufficient, what is lacking?

How much help do you get/have you got from your auditor in dealing with component accounting? Do you think their role has become more important with the introduction of the new framework? Do you think they will have increased demand and become stricter in their assessments? Have you used any additional guidance? Do you look on how other companies in the real estate business work with K3?

#### Part 3, accounting motives

Which direct effects does the introduction K3 have on your accounting? How does component accounting affect the room for discretion? Will the introduction affect your accounting motives or the choice between activating or deducting? Will the new framework require any new decisions to reach your financial targets?

What does the ownership structure in your company look like? What does the profitmaximizing purpose/business-driven purpose have on your accounting choices? What does the owners' demands on the management look like in terms of yield demands, solidity targets et cetera? Does component accounting affect these targets? How involved are the owners in the implementation of the new framework?