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Accounting and auditing in municipal organisations

- Four papers on accounting compliance and audit costs

Accounting and auditing in municipal organisations

– Four papers on accounting compliance and audit costs

Mattias Haraldsson



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DOCTORAL DISSERTATION

by due permission of Lund University School of Economics and Management,
Department of Business Administration, Lund University, Sweden.

To be defended at EC3:207, Holger Crafoords Ekonomisentrum,

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Abstract This thesis is a quantitative study of accounting compliance and audit costs in Swedish municipal organisations, consisting of four papers. Three of the papers explore factors that explain accounting compliance concerning financial reporting and revenue recognition in Swedish municipal water, sewerage and solid waste management organisations. The fourth paper explores the determinants of professional audit costs in Swedish municipal administrations. The overall purpose of this thesis is to contribute to the knowledge of what factors influence accounting compliance and audit costs in municipal organisations. Explaining accounting compliance in the water and sewerage and solid waste management sectors reveals that these sectors are influenced partly by different factors and partly by the same factors but differently. The results indicate that the strength and the strictness of the institutional framework (legislation, sanctions, court cases) play an important role in relation to if and how each sector is influenced by certain economic, political and institutional factors. Further, the studies show that factors like market competition, legal form of corporation, regionalisation, cross-sectoral coordination and engaged audit firm alter, replace or introduce new institutional, political and economic forces that influence accounting compliance. These are all factors that can be linked to municipal reforms, thus providing some evidence on the consequences of such reforms. Regarding audit costs the results of the thesis also indicate that audit costs vary dependent upon external stakeholder factors (population, tax base and tax rate), which supports the proposition that audit cost might be influenced by external monitoring demand and political signalling incentives. The implication is that audit might not only be a tool to secure compliance; it might also be a tool to manage stakeholder relations. From a policy perspective, the results indicate that the changing institutional and organisational environment (municipal governance reforms) has not been matched by attention to, and regulation of, reporting structures that secure external vertical accountability reporting, neither at the utility service level and nor at the consolidated municipal level. The general implication for future policy and regulations should therefore be to recognise the influence of different economic and institutional forces and develop accountability models that enable and preserve the benefits of governance forms and structures without losing transparency and accountability. The findings of this thesis suggest that accounting regulation and audit control need to bridge the public–private sector divide, level out sector-specific regulations and possibly connect regulation and accountability to the consolidated municipal organisation in order to preserve organisational freedom while securing compliant accountability information to relevant stakeholders.		
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– Four papers on accounting compliance and audit costs

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Emma and Aston. Forever.

Finally, it must be said, the preparer of this thesis is of course solely accountable for any errors in accounts or deviations from scientific norms.

Mattias

Malmö, 2016-03-03

List of articles

This thesis consists of four papers (see also Appendix), which are listed below:

Paper 1

Haraldsson, M. and Tagesson, T. (2014), “Compromise and avoidance: The response to new legislation”, *Journal of Accounting & Organizational Change*, Vol. 10, No. 3, pp. 288–313.

Paper 2

Haraldsson, M. (*forthcoming*), “Transparency and accountability lost? Full cost accounting reporting in the Swedish municipal solid waste business”. Accepted for publication in *Journal of Accounting & Organizational Change*.

Paper 3

Haraldsson, M. “When revenues are not revenues: the influence of municipal governance on revenue recognition within Swedish municipal waste management”. Submitted to scientific journal.

Paper 4

Collin, S-O., Haraldsson, M., Tagesson, T. and Blank, V. (*forthcoming*) “Explaining municipal audit costs in Sweden: Reconsidering the political environment, the municipal organization and the audit market”. Accepted for publication in *Financial Accountability & Management*.

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Chapter 1 – Introduction

This first chapter of the thesis, the introduction, briefly describes the background and the purpose of the thesis. The chapter further summarises the conducted research, the research approach and also briefly the results.

1.1 It started with a rude awakening

In the year 2007, I started to work as a public sector auditor, in this thesis termed professional (!) auditor, with the duty to scrutinise municipal financial reports. I got off to a flying start at my new job at the audit firm, with responsibility for examining the financial statements of one of Sweden's larger municipalities. The year after, I was not flying any more.

After my first year of service, the Council of Municipal Accounting decided to study and review all the financial statements of all the municipalities in Sweden from a compliance perspective. Straightforward – to what extent do the financial statements of Swedish municipalities comply with municipal accounting regulation? It was a good thing, wasn't it? Two problems, however: one general and one more personal. The general problem first, and I quote:

The overall results showed that compliance with accounting standards and legislation in general was poor; on average, the municipalities deviated from almost one-third of the Standards. (Tagesson and Eriksson, 2011, p. 272).

The personal problem? Well, "my" municipality was one of the worst sinners! Good thing that I don't have a personal responsibility for my audit, I thought! No... As a serious and devoted auditor I actually started to think (believe it or not) about why "my" municipality did not comply with current accounting regulation. The accounting staff – they all seemed devoted to their job. And why didn't I make any remarks? To the best of my knowledge and

memory, I was also devoted to my job. And nothing really happened; there was no local debate or consequences. However, the study of the Council of Municipal Accounting started a general discussion about financial reporting among municipalities, the status of accounting regulation and the responsibility of the auditors.

Although the above paragraphs are written in a bantering tone, it is a true story. I started in the municipal audit business in 2007 and with time I realised that there was a tradition or culture, both among those who prepared the financial statements and among those who had the role of scrutinising the numbers, that accounting standards were not considered as regulation, rather more as recommendations, literally. Over the years I heard many local stories regarding the “use and abuse” of financial accounting numbers, but there were also those who distinguished themselves, who excelled in the art of financial reporting. I started to think about the bigger picture, if there were structures or patterns that supported or impeded high quality financial reporting, because there were, at the time, huge differences among municipalities. I started think about accounting compliance and auditing in municipal organisations, which, as it happens, is a good theme for a thesis!

(“My” municipality later came to be recognised, for several years in a row, as having one of the best municipal annual reports in the country. Not my doing, but I will rest in peace.) I now turn to the more scientific part of this thesis.

1.2 Purpose of thesis

Over the last 30 years, the implementation of accrual accounting in public sector settings has been fundamental to public sector accounting policy development. Accrual accounting has been seen as part of the widespread reform movement known as New Public Management (NPM) and New Public Financial Management (NPFM), with the purpose of supporting greater efficiency, effectiveness, transparency and accountability (Hood, 1995; Olson et al., 2001). The accrual accounting approach was in many countries first introduced at the municipal level and then at the national state level; early adopters were countries like New Zealand and Australia (Carlin, 2005), but also Sweden (Bergevörn et al., 1995; Pina et al., 2009). The international diffusion of accrual accounting has continued in different forms

and at different paces since the pioneers started in the 1980s and 1990s. Christiaens et al., (2015) have documented the development and conclude that European local governments are clearly moving from the cash-based accounting system to an accrual-based accounting system. It is, however, not a development free from problems.

The move from cash accounting to accrual accounting highlights the importance of understanding accounting choice, compliance and auditing in municipal organisations. Not only because it is inherent within an accrual framework to make judgements on whether revenues and costs are earned or incurred as opposed to recording money in and out, but also because it seems that accrual accounting has in several cases been implemented with ill-specified accounting standards and questionable audit quality. This has resulted in a material gap between municipal accounting practice and accounting regulation (Christiaens and Rommel, 2008; Falkman and Tagesson, 2008). Christiaens and Rommel (2008) judge that many of the European municipal accounting reforms are struggling with a “*chronic lack of compliance*” (p. 60), a judgement that is supported by a number of structural evaluations (Christiaens, 1999; Da Costa Carvalho et al., 2007; Falkman and Tagesson, 2008; Cohen and Kaimenakis, 2011). Christiaens and Neyt (2014) argue that many public organisations currently cannot meet the basic needs of a good governance system in the sense that they prepare financial reports in accordance with accepted accounting standards, developed with the interest of stakeholders in mind and adequately controlled by an audit (p. 24).

Despite the identified problems it seems that accrual accounting is institutionally strong enough to survive for the foreseeable future (Christiaens et al., 2015; Brusca et al., 2015) and fuelled by the recent financial crisis in Europe, there is currently enhanced interest in supranational regulation of public sector accounting through IPSAS (International Public Sector Accounting Standards) and EPSAS (European Public Sector Accounting Standards). Locally in Sweden, where the research of this thesis is located, the municipal accounting act is currently under revision with the specific purpose of examining possible measures to improve compliance with the Municipal Accounting Act and issued accounting standards (Dir. 2014:125, p. 11). Similarly, public sector financial accounting research has also shifted from an initial focus on the conceptual “fit” of the “business like” accrual accounting system to a focus on how policy and practice evolve and how they are working (Arnaboldi and Lapsley 2009, pp. 813-814). This thesis forms

part of this shift by addressing accounting compliance and audit costs in Swedish municipal organisations. A better understanding of these issues can potentially inform the development of accounting regulation and auditing systems that are currently under reform.

1.2.1 Purpose statement

This thesis is a quantitative study of accounting compliance and audit costs in Swedish municipal organisations, consisting of four papers (see section 1.4). Three of the papers explore factors that *explain accounting compliance* concerning financial reporting and revenue recognition in Swedish *municipal organisations* (municipal administrations, municipal local and regional corporations, municipal federations), with a focus on *water and sewerage management* and *municipal solid waste management*. The fourth paper explores the determinants of professional *audit costs* in Swedish *municipal administrations*. Taking the four papers together,

the overall purpose of this thesis is to contribute to the knowledge of what factors influence accounting compliance and audit costs in municipal organisations.

Since three papers address accounting compliance and one paper addresses audit costs, accounting compliance will be emphasised in this thesis. However, there are clear theoretical and conceptual links between accounting compliance and audit costs.

1.2.2 Summary of contributions

This thesis contributes to the knowledge of accounting compliance on an empirical level by investigating compliance regarding full cost accounting reporting and revenue recognition within cost price regulated municipal utilities (water, sewerage and waste management) in Sweden. These are accounting topics and empirical settings that are scarce in previous accounting compliance research. Investigating municipal audit costs also has its own empirical merit since it is an unexplored issue in the Swedish context, and Hay (2013), after reviewing the last 30 years of international audit cost research, describes the few public sector contributions as “*exotic*” (p.164).

Theoretically, this thesis provides further evidence that factors related to both economic agency incentives and institutional forces explain variation in accounting compliance. Explaining accounting compliance in the water and sewerage and solid waste management sectors reveals that these sectors are influenced partly by different factors and partly by the same factors but differently. One of the resulting propositions is that the strength and the strictness of the institutional framework (legislation, sanctions, court cases) play an important role in relation to if and how each sector is influenced by economic, political and institutional factors. The thesis also indicates that factors like market competition, legal form of corporation, regionalisation, coordination and engaged audit firm influence accounting compliance to some extent. These are all measures that can be linked to reforms, e.g. new public management. Thus, the conducted research also provides some evidence on the intended and unintended consequences of municipal reforms.

All in all, this thesis contributes with further insights and suggestions on why municipal accounting compliance diverges in an uncontrolled way. Based on the analysis of the two Swedish municipal utility sectors the question of which, why and in what way certain factors influence accounting compliance seems to be dependent upon the interrelation between accounting regulation, sector-specific institutional framework, reforms and governance decisions. More practically, the results show that different levels of compliance not only materialise within municipal subsectors and between subsectors, but also within the same consolidated municipality. The findings suggest that accounting regulation and audit control need to bridge the public–private sector divide, level out sector-specific regulations and possibly connect regulation and accountability to the consolidated municipal level in order to preserve organisational freedom while securing compliant accountability information to relevant stakeholders.

Regarding municipal audit costs, the Swedish municipal setting is interesting because the setting provides an opportunity to determine whether cross-sectional differences in audit costs might be explained by monitoring and signalling incentives related to the political environment. The results of the study do indicate that audit costs vary dependent upon external stakeholder factors, which supports the proposition that audit cost might be influenced by external monitoring demand and political signalling incentives. The implication is that audit might not only be a tool to secure compliance, but also a tool to manage stakeholder relations.

1.3 Concepts and empirical objects

1.3.1 Accounting compliance and audit cost

Broadly, financial accounting builds on accounting regulation. Regulation provides the ground-level framework, principles and theory for what methods to use, what judgements to make, what information to disclose and when this shall be done (e.g. Libby et al., 2015). Typically when reporting entities, private as well as public, present their annual reports, they must consider accounting laws, accounting standards and other relevant guidance or practices among peers – so-called generally accepted accounting principles (GAAP) (Tay and Parker, 1990, p. 75; Artsberg, 2003, p. 128; Municipal Accounting Act 1997:617, Ch. 1, § 3). In this thesis, accounting regulation equals GAAP (accounting law, standards, guidance, etc.). The purpose of accounting regulation is to control the daily instrumental accounting practices (e.g. Tay and Parker, 1990; Bergevärn et al., 1995). Accounting norms form a wider concept since there can be other norms, not part of GAAP, that control or influence accounting practice (Bergevärn et al., 1995) – for example, old, competing or emerging accounting norms.

Compliance is defined by the adherence to accounting regulation and any discrepancy between regulation and practice can be described as non-compliance. Thus, this thesis does not aim to address the adoption of concepts, principles, laws and standards, as in, for example, Carpenter and Feroz (2001) or Collin et al. (2009). These are given. It is the deviation from GAAP that is the empirical object and subject for explanation. Compliance or non-compliance is a condition or status of accounting practice vis-à-vis regulation at a certain point of time (e.g. Tay and Parker, 1990). It should be noted that compliance does not mean high quality accounting *per se*, rather this will depend on the quality of regulation.

The practical problem is that what the relevant accounting regulations are and how they should be interpreted is not always crystal clear and is sometimes subject to interpretation. Experience says that it often takes time to translate accounting regulation into what is actually required of the reporting entities (Libby et al., 2015). Indeed, some requirements are strict, with a strong institutional support, as they are explicitly and concretely defined by financial accounting laws or standards, while others might be more or less vague and implicitly regulated (Tay and Parker, 1990). Yet other accounting items are

more of an adequacy-nature (Christiaens, 1999). This can, for example, be descriptions of efficiency and goal attainment, which are related to the general regulation of accountability of municipalities in Sweden (Haglund et al., 2014). Reporting entities must normally also take several measures regarding method, judgement and disclosure in order to comply with one single standard, which multiplies with respect to several standards. Further, some issues might be more important than others (Robbins and Austin, 1986). Thus, compliance can be placed on a continuum from full compliance to non-compliance, but also in terms of the severity of non-compliance.

All in all, this implies that it is not always obvious for the reporting entity, the auditors or the researcher what the relevant accounting regulations are, when accounting is in or out of compliance and how severe non-compliance is. How this problem is addressed in this thesis is described in section 1.5.

In audit research, audit costs/fees might refer to audit budget (Baber, 1983) or an end of a period cost (Pong and Wittington, 1994). In this thesis, the term “audit costs” refers to an end of a period cost (year 2013). In public sector audit research, audit costs/fees are interesting since they may say something about the market and price-setting policies of audit firms (Rubin, 1988; Giroux and Jones, 2007) and/or that audit costs/fees say something about the supply of auditing in response to demands on, or need to signal, accountability (Baber, 1983; Evans and Patton, 1987; Ward et al., 1994). It is this latter aspect that is the focus of this thesis.

1.3.2 Defining the empirical objects

The four papers of this thesis address accounting and auditing in quite specific municipal settings. In order to understand the research, some definitions and descriptions are provided below.

Papers 1, 2 and 3 address accounting issues within the Swedish municipal water and sewerage and solid waste management sectors that are related to the municipal cost price principle. The *cost price principle* states that municipalities may not levy charges exceeding the cost of providing the services. The aim of the cost price principle is mainly to protect the rate payers from monopoly pricing through the regulation of a maximum level of user charges (Malmer, 2003).

Papers 1 and 2 investigate the practices of full cost accounting reporting. *Full cost accounting reporting* is a special type of segment reporting and is defined as the use of an accounting system, including cost allocations, that isolates the balance sheet items and the income statement related to the regulated monopoly operation and then presents the information in a documented way.

Paper 3 investigates the practices of revenue recognition in relation to overcharging monopoly service users. *The overcharge principle* states that when the pricing of a municipal service is explicitly regulated by the cost price principle and the collected charges exceed costs, the revenue should be reduced and the overcharge should be treated as deferred income/debt (Recommendation 18.1 “Revenue from fees, grants and sales”, The Council for Municipal Accounting, 2009).

Paper 4 address professional audit costs at the Swedish municipal level. The Swedish municipal audit system consists of both elected political auditors and professional auditors. *The professional audit costs* thus consist of those costs that are incurred through hiring auditors, either internally employed or procured on the market for municipal audit services.

1.4 Summary of conducted research

This section provides a short summation of the four papers of the thesis. The theories used and methods applied will be reflected upon in section 1.5 below and the results will be discussed at length in chapters four and five.

1.4.1 Paper 1: Compromise and avoidance: the response to new legislation

The aim of paper 1 is to describe, analyse and explain the actual accounting compliance (outcome) of the new reporting requirements for the Swedish water and sewerage sector under the new Public Water Services Act. The background is that the Public Water Service Act prescribes that the municipal organisations responsible for the water and sewerage services must disclose a full cost accounting report and follow generally accepted accounting principles (GAAP) when so doing. The theory and hypothesis are mainly

based on institutional theory. The empirical data are based on a document study of the annual full cost accounting reports for the financial year of 2010 and includes data from 250 of Sweden's 290 municipalities. The document study was conducted with a checklist measuring compliance. The data were analysed using statistical methods.

The study contributes to the purpose of this thesis since factors are identified that explain compliance regarding full cost accounting reporting in a municipal utility sector (water and sewerage management) financed by regulated user charges, with explicit requirement of full cost accounting reporting and extensively influenced by change in governance forms (especially by the legal form of municipal corporation).

Most of the organisations surveyed in this study had some kind of full cost accounting report, but non-compliance was still widespread. Only 55% of the explicitly regulated accounting issues were in compliance and, further, only 38% of the measured disclosure requirements were included in the reports. The total compliance level was 44%. The statistical analyses show that compliance was significantly and positively associated with the legal form of corporation and negatively with minority rule (political competition). The results also indicate that engaged audit firm also influence compliance levels, indicating that audit firms might differ in culture, experience, audit methods and thus normative influence.

1.4.2 Paper 2: Transparency and accountability lost? Full cost accounting reporting in the Swedish municipal solid waste business

The aim of paper 2 is to empirically investigate if Swedish municipal solid waste management organisations employ full cost accounting techniques in order to report back on their public mission, and to what level of compliance and transparency this is done (full cost accounting reporting). Further, the aim is to explore the causes of variation in those accounting practices within the sector. The background is that solid waste management services are regulated by the cost price principle (stated in the Swedish Environmental Code), which makes it essential that the records for the solid waste management operation are organised in such a way that the revenues and costs can be distinguished and reported in order to support an accountability function. The theory and hypothesis are mainly based on agency theory and

institutional theory. To collect and document the accounting and disclosure practices of full cost accounting of the Swedish solid waste management organisations (2013), a questionnaire approach was selected. Of 226 possible respondents, 113 (50%) answered. The data was analysed using statistical methods.

The study contributes to the purpose of this thesis since factors are identified that explain compliance regarding full cost accounting reporting in a municipal utility sector (solid waste management) financed by regulated user charges, with implicit requirement of full cost accounting reporting, and extensively influenced by change in regulation (deregulation of industrial waste) and change in governance forms (municipal corporations, regionalisation, etc.).

Only 42% of the organisations surveyed in this study employ practices of full cost accounting related to the cost price principle and only 34% of the measured compliance items were included. The statistical analyses show that having techniques for full cost accounting (dichotomous) was significantly and positively associated with the number of households (size), tax base and the coordination of the financial department with the municipal water and sewerage service. Factors with a significant and negative influence were market competition and regional organisation. Regarding compliance measured with an index, only the number of households (size) had a significant and positive effect.

1.4.3 Paper 3: When revenues are not revenues: the influence of municipal governance on revenue recognition within Swedish municipal waste management

The aim of paper 3 is to explore to what extent major municipal governance forms and structures influence accounting compliance in municipal organisations. Current municipal accounting standards in Sweden (Recommendation 18.1 “Revenue from fees, grants and sales”, The Council for Municipal Accounting, 2009) regulate that overcharging monopoly service users shall not be recognised as revenues. Rather, it should be recognised as a debt. This paper measures the adherence *to the overcharge principle* within the Swedish municipal solid waste management sector. The theory and hypothesis are based on agency theory and institutional theory. The study is based on a questionnaire survey carried out in 2013. Of 226

possible respondents, 113 (50%) answered. The dependent variable, the application of the overcharge principle, was measured in the questionnaire by asking if a potential overcharge was recognised as debt or as revenue. The data was analysed using statistical methods.

The study contributes to the purpose of this thesis since factors are identified that explain compliance regarding revenue recognition in a municipal utility sector (solid waste management) financed by regulated user charges and extensively influenced by change in regulation (regarding industrial waste) and governance forms (municipal corporations, regionalisation, etc.).

Only 30% of the organisations surveyed in this study recognise an overcharge as debt, complying with the Swedish accounting standards for revenue recognition. The major factor that significantly and positively explains variations in compliance is the coordination of the financial department with the municipal water and sewerage service, and the major factor that significantly and negatively explains variations in compliance is the legal form of municipal corporations.

1.4.4 Paper 4: Explaining municipal audit costs in Sweden: Reconsidering the political environment, the municipal organization and the audit market

The aim of paper 4 is to explore the determinants of professional audit costs in Swedish municipalities, with the specific purpose of investigating whether professional audit costs are partly explained by the political environment. The theory is mainly based on theories of signalling and monitoring incentives. The data consists of financial data measuring professional audit costs, collected from every municipality. The data was analysed using statistical methods.

The study contributes to the purpose of this thesis since factors are identified that explain professional audit costs in the Swedish municipal setting characterised by political control of the resource allocation for auditing. Thus the study examines whether cross-sectional differences might be explained by factors related to the political environment, rather than the conventional factors related to audit risk, client complexity and audit market.

The analysis identifies a significant and positive relation between audit costs and the municipal tax rate, municipal size and sparsely populated

municipalities. There is also a significant and negative relation between audit costs and tax base and one of the audit firms.

1.5 Research approach

1.5.1 Theoretical approaches

As described in the summary of conducted research in section 1.4, the theories used in this thesis are mainly variations of economic agency theory and institutional theory. Agency theory and institutional theory are the dominant theories used in past research in order to explain and predict accounting practice both in private and public sector settings (Mezias, 1990; Feroz et al., 2007; Collin et al., 2009; Bolívar et al., 2013) and accounting compliance (Falkman and Tagesson, 2008; Cohen and Kaimenakis, 2011). The choice of the two theories is motivated by the fact they can be explicitly used to identify the antecedents and rationales of accounting practices. Recent research also stresses the potential in using the theories in conjunction with each other and, importantly, factors derived from both agency theory and institutional theory have been able to explain accounting practices in public sector settings before (Carpenter and Feroz, 2001; Collin et al., 2009; Bolivar et al., 2013).

Due to the complexity of the public sector organisational environment, structure and behaviour, it is argued that multiple theories have the potential to complement each other and advance our knowledge of accounting practices (Feroz et al., 2007; Collin et al., 2009; Johansson and Siverbo, 2009; Saliterer and Korac, 2013). This is because several theories have greater potential to capture the empirical phenomenon under complex circumstances, that is, to explain practice. Following this line of thinking, Hoque et al. (2013) argue that using more than one theory can support a more holistic analysis, for example, whether an accounting practice has been chosen “for economic rationalisation purposes or for a legitimisation purpose or for both reasons” (p. 1186). Collin et al. (2009, p. 143) further argue that the use of several theories makes it possible to adopt a more dialectic attitude towards scientific development where different theories are not separated but confronted and analysed against each other.

To “have a conversation” with different theoretical schools has been important in this thesis. For example, a major focus in this thesis is on the influence of municipal governance forms and structures on accounting compliance and it has therefore been fruitful to try to sort out these influences using institutional theory combined with economic agency theory. A municipal corporation, for example, is not a theoretical construct but an empirical phenomenon, and the legal form brings a package of “institutional factors” that might influence practice. Another example is that creating a regional organisation introduces different agency relations that may influence reporting practices. In this way, different theories can be used in order to sort out possible theoretical connections between empirical phenomenon and accounting practices.

It is, at the same time, important to recognise the risk inherent in mixing theories with different basic assumptions (Johansson and Siverbo, 2009, p. 199) as they might translate into identical, complementary or even conflicting predictions (Collin et al., 2009, p. 167). Further, as this thesis stresses, many of the measures used in this and in previous research can be indicators of several theories. This implies that it is more difficult to draw strong conclusions, since several theories are allowed to have a say on the matter. I believe that this complexity is a good thing, since practice is complex and influenced by a variety of forces that can be different depending on setting and can change over time. What this highlights is the importance of contextual interpretation also in quantitative research, a matter I now turn to.

1.5.2 Methods employed

As the purpose is to contribute to public sector accounting research by identifying factors that explain cross-sectional differences in accounting compliance and audit costs, a quantitative research strategy has been employed (Roberts, 1999). It is, however, unlikely that one can establish law-like causal links between independent (factors) and dependent variables (compliance, audit costs) in financial accounting research. One thing is that accounting phenomena are socially constructed (Luft and Shields, 2014), but also that it is difficult to measure theoretical propositions (Roberts, 1999), which easily results in indicators of different theories (Collin et al., 2009). Further, there can also be many plausible explanations for a given phenomenon and as Luft and Shields (2014, p. 552) argue, a single study

with a given design is unlikely to provide strong evidence against all plausible alternatives, and researchers must make trade-offs.

Even though statistical methods are used to measure the strength between variables, statistical significance tests do not eliminate the need for theoretically informed judgement (Lindsay, 1995, p. 39). Quantitative studies have a more mechanical analytical part and a more interpretive analytical part. It is within the interpretive part that I suggest that different theoretical approaches and knowledge of the empirical area are of great help in making those “*informed judgements*”. What quantitative data and statistical analysis can do is to support theory and suggest plausible explanations (Roberts, 1999; Luft and Shields, 2014) and this ability will, in the end, depend on the quality of research.

Papers 1, 2 and 3 have similar purposes and empirical objects – full cost accounting reporting and revenue recognition. The papers build on the idea of measuring accounting practice in relation to accounting regulation.

Papers 1 and 2 uses a compliance index and it is the variations in compliance points that are explained. Using an index to measure compliance with accounting regulation is conventional in financial accounting research (see Christiaens, 1999; Da Costa Carvalho et al., 2007; Falkman and Tagesson, 2008). The set of accounting practices to measure was extracted from the Public Water Service Act, The Swedish Environmental Code, the Municipal Act, the Municipal Accounting Act, the Standards from the Council of Municipal Accounting, and recommendations from The Water Industry Association and from the Swedish Waste Management and Recycling Association. These sources are argued to constitute GAAP as they represent the accounting laws, accounting standards and relevant guidelines.

The accounting issues and their measurement were discussed with other accounting experts, both from academia and from the auditing profession, as a way to validate the construct. To give compliance points (1 or 0) and summarise the points, without weighing them internally, is also conventional in this type of research. One reason is that weighted and non-weighted indexes have produced approximately the same results (Robbins and Austin, 1986), but it is also difficult and quite arbitrary to weigh the importance of different accounting issues against each other. The compliance indices used include mostly disclosure requirements, but also some technical accounting issues. One such issue is the principle of revenue recognition against the cost

price principle, which was also treated as a *single measure* in paper 3. However, the idea is essentially the same.

The major differences between the studies are that in paper 1, compliance is measured via a document study using a checklist, while papers 2 and 3 are based on a survey asking about accounting practices. The strength and weakness of measuring compliance via a checklist and documents is that the researcher makes the judgement, which implies a certain control over what is measured. However, the researcher's experience and subjective judgements might also influence output. The checklist mainly included items of the nature "*is there an income statement or not*", which involve small judgements, but the technical accounting practices are sometimes harder to visualise. In those cases I tried to crosscheck with other sources (annual reports, history or e-mail contact). Lastly, my seven years working as a public sector auditor have given me training and experience in making judgements related to compliance. Finally, regarding the compliance index, it should be noted that the index does not measure full compliance or quality in the sense that the numbers also are accurate.

The data on accounting practice in papers 2 and 3 is based on a survey. One drawback with this approach is that the questionnaire does not measure compliance directly (I have not seen it myself) because it is based on subjective answers from others. To construct the questionnaire, interviews were conducted with representatives from seven different municipal solid waste organisations, with the aim of mirroring the most common organisational forms (local government administration, local government corporation and regional municipal federations and corporations). After the questionnaire was constructed, it was tested on three new respondents. Further, as with paper 1, I tried to crosscheck some of the results with other sources (annual reports, history or e-mail contact). For example, regarding revenue recognition, I crosschecked all the organisations that stated that they treated an overcharge as debt against annual reports, since this was the most unlikely answer.

Paper 4 only builds on archival data, provided by an audit firm, collected from municipal web pages, annual reports and Statistics Sweden. The problem with the audit cost data is that the researches have not fully controlled the collection of the data. To mitigate this problem I used my own experience as a public sector auditor and statistical methods (outlier statistics) to visually inspect and scrutinise the archival data.

Through the above measures, the ambition has been to secure a reasonable level of validity and reliability in order to be able to make the explanations of accounting compliance and audit costs plausible. As pointed out above, the interpretations of the statistical connections between variables must relate to the empirical context, which is described in the next chapter.

Chapter 2 – Empirical context

Chapter 2 is devoted to describing the empirical context, which is accounting and auditing in Swedish municipal organisations, with a specific focus on the municipal solid waste sector and water and sewerage sector.

2.1 The Swedish municipal sector

Swedish public administration is organised on two levels. At national level, the Swedish people are represented by the *Riksdag* (Swedish parliament), which has legislative powers. Proposals for new laws are presented by the government, which also implements decisions taken by the Swedish parliament. The government is assisted in its work by ministries and approximately 300 agencies. At the local level Sweden has a two-tier system, with 290 municipalities and 21 county councils. National and local government levels have different regulations and legislation regarding budgeting, accounting and auditing (Tagesson and Grossi, 2015). The empirical context of this thesis is the 290 municipalities and their different organisations.

Sweden has a total population of about 9.7 million residing in 290 municipalities and the average size of a municipality is about 33,000 inhabitants. The largest municipality has approximately 912,000 inhabitants while the smallest has fewer than 2,500 (the median population of a Swedish municipality being 15,300). Swedish municipalities are also economically influential since they consume about 13% of the GNP and are locally in many areas by far the largest actor (Argento et al., 2010).

The power of municipalities is based on representative democracy; elections at the local level are direct and held every fourth year at the same time as the election for the national parliament. According to the Municipal Act, the council has a special responsibility to appoint political auditors, an election

committee, and an executive board with overall duties. Municipalities are obliged and responsible for carrying out a wide range of services including elderly care, schools, and cultural services. Relevant for this thesis is that municipalities are obliged to manage, as principals, the water and sewerage services and solid waste management services.

In Sweden, municipal services are mainly financed by municipal income taxes (about 68%), fees and government grants (about 22%) and by other sources (10%) such as rents, leasing, interest, land development, etc. The municipalities have the right to levy their own taxes, and their existence is guaranteed by the central government. This means that a municipality can hardly go bankrupt as long as there are municipal citizens to tax and as long as the central government of Sweden exists. Further, differences in taxable capacity and demographic conditions are levelled out by an equalisation system where funds are reallocated between municipalities with different conditions (Argento et al., 2010).

Even though their responsibilities and political structure to a large extent are regulated, municipalities have, traditionally and by law, a large degree of freedom as to how they organise themselves and their services (Argento et al., 2010). Municipalities, through the council, decide upon the number, role and mission of committees. Activities can also be organised and carried out through municipal companies, where the council appoints the members of the companies' boards. Over the last decade, there has also been an increase in cooperation between municipalities. There are mainly three regulated forms of cooperation: joint committees, municipal federations and corporations. In effect, organisational freedom has resulted in variations regarding the organising of services in committees, corporations or municipal cooperation depending on the local municipal decision. The water, sewerage and waste management sectors have been extensively influenced by local governance decisions on organisational forms.

2.2 Swedish municipal water, sewerage and solid waste management

2.2.1 General features

Both Swedish water and sewerage management and solid waste management are municipal core activities and statutory municipal monopolies. Municipal responsibility for waste is regulated in the Swedish Environmental Code (1998:808; ch.15, § 8), which gives the municipalities exclusive rights to collect and treat household waste (and similar waste from other sources). The special law giving municipalities the responsibility for water and sewerage management is the Public Water Services Act (2006:412; 6 §). For both services, the delivery of the services can be performed by private sector actors, but the principal responsibility cannot be sold to private sector entrepreneurs.

Distribution of water and wastewater treatment in Sweden is provided by municipalities. The business is characterised by its capital intensity, as it requires significant investment to build, maintain and develop systems and works. The business therefore exhibits economies of scale, and the potential for competition over supply to end users is limited.

The solid waste management sector is not as capital-intense as the water and sewerage sector, but the capital intensity depends on whether or not the municipality is involved in the more capital-intensive treatment stage. Collecting and treating waste has been, over the years, subject to deregulation and reregulation. A special feature of the municipal waste management sector is therefore that they, combined with the obligatory service provision, can act in more or less competitive markets for industrial waste.

2.2.2 Pricing and the cost price principle

Unlike other municipal activities, water and sewerage operations and solid waste management are mainly financed through charges paid by users of the services. Municipalities have the legal ability to fund these activities through taxation, but the vast majority of Sweden's municipalities aim and manage to finance the operation entirely by charges (Malmer, 2003). The price-setting of these municipal utilities is regulated by the cost price principle, which

states that municipalities may not levy charges exceeding the cost of providing the services. The cost price principle has a strong position in Sweden (Malmer, 2003). The principle is established in the Swedish Municipal Act (1991:900; ch. 8 § 3c) and also regulates the water and sewerage management and municipal solid waste management through special legislation (the Public Water Service Act, The Swedish Environmental Code). What the cost price principle implies is that overcharging is against the law (Bohlin, 2011, p. 120).

The difference between the two municipal utility services is that the institutional support for the cost price principle is stronger within the water and sewerage sector. Malmer (2003) observes that the cost price principle was one of the leading principles in the first Public Waterworks and Sewerage Act from as early as 1955. In 1970, a new Act was introduced and a special administrative court, the Swedish Water Supply and Sewerage Tribunal, was established to adjudicate disputes between the principals and property owners. The Tribunal has had an important role in interpreting the consequences of the cost price principle within the sector and there have been several court cases dealing with overcharging subscribers over the years (see Malmer, 2003). In the latest update to a new legislation, The Public Water Services Act (2006:412) in 2007, the cost price principle was further supported by the introduction of an explicit requirement of full cost accounting reporting (§ 50).

The solid waste management sector has been regulated on a cost price basis since the 1970s (Malmer, 2003). Today the Environmental Code (1998:808; ch. 27, § 5) states that the charges may not exceed what is needed to cover the necessary costs of the operation. The same paragraph states that the principal may price its service in a way that supports environmentally efficient treatment of waste; that is, it is possible to use pricing to manage the behaviour of households. However, on an aggregated level, the cost price principle applies. Compared to the water and sewerage sector there is no special court, fewer court cases dealing with deviations from the cost price principle and no explicit requirement for full cost accounting reporting.

For both sectors, it is the individual municipal council that has to decide upon the construction of the fee model, and this applies regardless of the organisational form – municipal administration, federation or corporation.

2.2.3 Governance forms and structures

To deal with their mission and to adapt to regulatory, market and regional conditions, the municipalities' involvement in the water and sewerage and waste management sectors has been organised in a number of ways. Externalisation of service production to municipal corporations is a widespread alternative in both sectors. Regionalisation and organisational mergers between municipalities are also important governance forms within the two sectors. In many ways the organisational development of the water and sewerage management and the solid waste management are similar, since they are in the majority of cases arranged within the same organisations. However, one feature separates the two sectors – the relation to market.

On a basic level, the Swedish water and sewerage sector has not been fundamentally reformed or privatised. It has long been a municipal monopoly (Malmer, 2003). Instead of reforming the sector, the government has recently, under the Public Water Services Act (2006:412), sought to strengthen the control of the public monopoly by forbidding municipalities to renounce ownership to private parties. Similarly, the municipal responsibility for household waste is regulated in the Swedish Environmental Code (1998:808; ch. 15 § 8) as a responsibility that cannot be externalised to private sector actors.

Historically, however, the municipal responsibility for waste has been much broader. In recent decades, political decisions have led to a gradual loosening of the Swedish market for waste. Notably, Sweden deregulated the treatment of commercial and industrial waste in 2000 and of hazardous waste in 2007 (Swedish Competition Authority, 2008). The reforms have created a market for waste and as a consequence, many local municipal waste organisations combine a task orientation with a market orientation. Thus, even though the responsibility for municipal waste management, “the legal monopoly,” nowadays applies only to a small portion of the total waste market, in practice the municipalities still handle a very large part of the waste due to their dominance in the treatment stage.

2.3 Swedish municipal accounting regulation

2.3.1 Implementing accrual accounting

Swedish municipalities started to experiment with business like accrual accounting arrangements at the end of the 1970s and beginning of the 1980s, and it is described that Swedish municipalities had, supported by guidelines from the Swedish Federation of Municipalities, implemented accrual accounting by the end of 1980s (Bergevörn et al., 1995, p. 33). During these early years, the application of accrual accounting was more or less voluntary, at least not required by law. In fact, it was the municipal council who decided how to account, a feature that probably has left its mark even today. The first accounting regulations supporting accrual accounting were made in the new Municipal Act of 1992, but it was not until 1998 that a municipal accounting law came into being.

There were several interrelated factors that led to the implementation of the accounting law. First of all, Swedish municipalities had, as described above, already implemented accrual accounting but in a less controlled way. Implementing an accounting law served as a measure not only to codify already existing practice, but also to create a framework to control and harmonise practice (Falkman and Tagesson, 2008). Secondly, Sweden had, at the time, gone through a recession and a financial crisis. During this period a discussion started regarding how to control sound economic behaviour among municipalities, and so the formulation of a requirement for a balanced budget, where income must exceed expenditure, started to take shape. Having demands for a balanced budget therefore required financial monitoring and control, which also gave fuel to the formulation of an accounting law (Haglund et al., 2014).

2.3.2 Current accounting regulation

Since 1998, accounting and bookkeeping for municipal administrations have been regulated by the Municipal Accounting Act (KRL 1997:617). The Municipal Accounting Act is a framework legislation that increases the importance of standards, decrees and guidelines in order to define GAAP. In terms of approach, Sweden has a tradition of a revenue-expense approach

based on historical cost accounting, and much of the special legislation regulating pricing and reimbursement systems in the public sector is based on this accounting approach (Tagesson and Grossi, 2015). It is argued that the revenue-expense approach is better aligned with the purpose of providing accountability information regarding the use of public money (Oulasvirta, 2014). Since organisational freedom resides at the municipal level, private sector accounting legislation also regulates the accounting of municipal organisations, that is, if they are run in the legal form of corporation. Municipal corporations must follow private sector legislation and regulation regarding accounting. Private companies are regulated by the Bookkeeping Act (1999:1078) and the Annual Accounts Act (1995:1554).

A key characteristic in both sectors is that the reporting entity shall follow GAAP. In the Swedish context, GAAP means that the preparer must comply with laws, standards and other relevant guidelines or practices followed among peers (Artsberg, 2003, p. 128, Municipal Accounting Act 1997:617, Ch. 1, § 3). The Council for Municipal Accounting is commissioned to monitor and develop GAAP for municipalities, and the Swedish Accounting Standards Board have a similar mission for Swedish corporations.

In developing the standards for municipal accounting, comparisons have been made with private sector accounting standards in order not to create differences that cannot be justified by the varying requirements of the two sectors (Tagesson and Grossi, 2015). Falkman and Tagesson (2008) explain that the differences between the laws regarding accounting in the private and public sectors are relatively small and for both sectors deviations from GAAP is very seldom objectively warranted (Norberg and Thorell, 2010; Tagesson and Grossi, 2015). There is however one important difference; citizens can appeal municipal decisions to the Administrative Court, but there is no connection between the Municipal Accounting Act and the Penal Code as there is in relation to the private sector Bookkeeping act.

2.3.3 The cost price principle and financial accounting

Even though the water, sewerage and waste management sectors have been regulated on a cost price basis since the 1970s, there existed for a long time no specific regulation of reporting requirements to enable verification of the cost price principle. However, it has, in older court cases dealing with overcharging water and sewerage subscribers, been argued that:

[...] the cost price principle will be meaningless unless the records for the water and sewerage operation are organised in such a way that the income and expenses can be distinguished (Proposition 2005/06:78 – Public water services, p. 100).

Eventually this led to a specific requirement for full cost accounting reporting for the water and sewerage sector, when a new public water services act was implemented in 2007. The new Public Water Services Act (2006:412) regulates accounting as follows:

§ 50 A principal shall, in respect of the business of organising and running a general water and sewerage site ensure

(1) that the activities are recorded and reported in accordance with generally accepted accounting principles where financial statements are reported separately and where the additional information shows how the principal has distributed common costs that have been shared with other activities, and

(2) that the statement, when it is approved, is available to the property owners.

The legislature's main motive was to ensure transparency and verification, inherently to protect the users from monopoly pricing but also ensure that the price-setting decisions of the municipal council were based on adequate accounting information (Proposition 2005/06:78 – Public water services, p. 101).

Even though the price regulation of the cost price principle applies equally to the water and sewerage sector and the solid waste management sector, there is no explicit requirement for full cost accounting reporting defined within the Swedish Environmental Code. The regulation only states that the prices shall be based on the necessary cost and may not include costs that are connected to other non-regulated waste services (Swedish Environmental Code, 1998:808; ch. 27 § 5). Thus, to be able to verify the adherence to the cost price principle, the regulation implicitly requires full cost accounting reporting. This view is also supported by the Swedish Waste Management and Recycling Association (Rapport 2005:22).

The recognition of revenues within municipal organisations that finance their activities through user charges regulated by the cost price principle is quite a particular issue. One important implication of the cost price principle is that it is against the law to make a profit based on the regulated service (Bohlin,

2011, p. 120). The consequence of an overcharge is expressed in the following way in one of several court cases:

If there is a significant overcharge the principal is principally liable to repay. (Proposition 2005/06:78 – Public water services, p. 85)

Thus, the cost price principle implies that an overcharge does not belong to the organisation; rather it has a legal obligation to return the overcharge, which is a debt in its strongest meaning. In accounting terms, this means that the basis for revenue recognition of income falls (Falkman and Tagesson, 2007). For this reason, the overcharge should be treated as deferred income and recognised as a liability on the balance sheet with a reduction of revenues and profit as a direct consequence. This interpretation is also manifested in one of the standards for municipal accounting:

To the extent the operation is explicitly regulated by the cost price principle and the collected charges exceed costs, the revenue should be reduced and the overcharge should be accounted as deferred income. (Recommendation 18.1 “Revenue from fees, grants and sales”, The Council for Municipal Accounting, 2009)

There is no essential difference in views on when income may be recognised as revenue in Swedish public and private sector accounting regulation (Falkman and Tagesson, 2007; Tagesson, 2010). However, a similar detailed guidance does not exist in the private sector standards, which might imply that the interpretation is not very well known in municipal corporations. Lastly, there is no special audit requirement for the verification of adherence to the cost price principle or to scrutinise the full cost accounting reports.

2.4 Swedish municipal audit regulation

The municipal audit was institutionalised in 1862 and is regulated today by the Municipal Act. After an election, the new assembly must elect a minimum of five auditors for the next four-year term. The auditors are political appointees and elected from the various political parties and as such they can be labelled as *political auditors*. The council not only appoints the political auditors, the council also decides upon local auditing regulations and the size of the budget for auditing. Importantly, the political municipal council is not an audit object; it is the politicians on the executive board and

other committees that are accountable to the council for their actions. The accountability is collective for the whole executive board and other committees, as well as individual for each member. It is the council that decides upon the liability of the board and committees (Tagesson and Eriksson, 2011).

According to the Municipal Act, the political auditors are to scrutinise whether all operations have been conducted consistently with their purpose, the stated goals of the council and according to regulating laws and directives and, further, whether this is done in a financially satisfactory and effective manner. The political auditors shall also scrutinise whether the financial reports give a true and fair view and whether the internal controls within the committees are sufficient. (Municipal Act 1991:900; ch. 9)

The Act states that the political auditors shall be assisted in their inspection by experts – termed in this thesis as *professional auditors* – whom they have chosen and whom they may use as required with reference to generally accepted auditing standards. The council and the political auditors can either create an internal audit office or hire professional auditors from the market. External auditing firms are to be hired through public procurement and in Sweden there is quite a concentrated market for auditing, with the Big 4 (PwC, KPMG, EY and Deloitte) dominating (Tagesson et al., 2015).

There are no sanctions against auditors – either political or professional auditors – who do not fulfil their obligations in accordance with the legislation or generally accepted auditing standards (Tagesson and Ericsson, 2011). Generally accepted auditing standards are developed by the municipalities themselves and professional accountants' ethics are not applicable to political auditors or to the professional auditors. This system of auditing is criticised because of the political auditors' lack of independence and the professional auditors' lack of competence (Cassel, 2000; Tagesson and Eriksson, 2011).

Also related to the auditing function, the organisational freedom of municipalities infuses other auditing functions and traditions into the public sector organisations. Municipal corporations are audited by authorised auditors. It is generally suggested that the coercive influence on compliance is more strongly related to the private sector audit function, compared to the public sector audit function (Tagesson, 2007). Private sector auditors have the means to make remarks and force their clients to comply with accounting

laws and regulations. The authorised auditors report directly to the corporate board and are personally responsible for their audit statement.

2.5 Future prospects

Parallel to the general public sector accounting development, Sweden is currently searching for ways to improve accounting and auditing quality. The municipal audit system has been discussed and reviewed several times, but this has only resulted in minimal changes to the system (Lundin, 2010). However, the Municipal Accounting Act is currently under revision (Dir. 2014:125). One major objective is to examine the need for measures to improve compliance with the Municipal Accounting Act and accounting standards (Dir. 2014:125, p. 11) and evaluate the need for a general and explicit requirement for full cost accounting reporting when motivated (Dir. 2014:125, p. 10). I believe that the results of this thesis suggest some important lessons in relation to these issues; see sections 4.4 and 5.2.

Chapter 3 – Public sector accounting and auditing

Chapter 3 begins with an analysis of the role of accounting, regulation and auditing in public sector organisations. The chapter then gives a background to the theories used and the factors explored within the empirical context in order to explain accounting compliance and audit costs.

3.1 The role of the accounting system in the public sector

Generally, there are two commonly accepted objectives of financial accounting information in the public sector. One of them is that financial accounting information should be useful for decision purposes (Ryan et al., 2002; Arnaboldi and Lapsley, 2009). While the decision usefulness of financial information in for-profit organisations relates to the needs of existing and potential investors, lenders and similar suppliers of capital (Coy and Dixon, 2004), internal use is emphasised in the public sector accounting literature (Arnaboldi and Lapsley, 2009).

The information can be used to provide full cost information in order to make resource allocation decisions, outsourcing decisions, service cost evaluations and pricing decisions (Groot and Budding, 2004). One relevant example in this thesis is that the municipal councils must decide upon user charges for water, sewerage and waste services based on full costs. However, one should not forget that municipal financial accounting information also has a potential decision usefulness for a range of external parties, such as suppliers, creditors, private schools and central government, depending on the circumstances (e.g. Bergmann, 2012).

The other objective is to provide transparency and information for accountability purposes. The role and purpose of providing information for accountability purposes is particularly stressed and described as the cornerstone of all financial reporting in the public sector (Ryan et al., 2002; Coy and Dixon, 2004). Transparency and accountability are seen as important aspects of good governance, appropriate behaviour, justice and better performance (Biondi and Lapsley, 2014; Schillemans and Busuioc, 2014).

The basic or minimal measure of transparency is the level of information accessible to all relevant stakeholders (Biondi and Lapsley, 2014, p. 148–149), and information is a necessary condition as the first step in accountability processes/mechanisms (Bovens, 2010, p. 952). It is not possible to have an accountability mechanism if there is no information about input, output and outcome. Hence, the aim for financial accounting and reporting is to satisfy the very basic prerequisites of accountability, and the production of formal financial information can often be the only way for stakeholders to obtain reliable and comprehensive information about performance (Ryan et al., 2002). However, because there is information provided does not mean that the information is understandable or that accountability actually is claimed. “Drifting principals” that do not use accounting information (Zimmerman, 1977) or claim accountability (Schillemans and Busuioc, 2014) is a known problem in the public sector.

The complexity lies in that there are multiple goals and aims, many different stakeholders with quite different agendas and many layers of accountability relationships between the stakeholders, the politicians and the public managers (Pina et al., 2009). The ultimate principal, the citizens, is a complex stakeholder that might take different interest in municipal services and decisions depending on their own relation to the municipal organisation. The delegation of responsibilities from the central government to local municipalities also creates strong but complex accountability relationships. These relationships can be many, with different and sometimes contradicting requirements through financial arrangement, special laws and decrees. Further, the delegated responsibility usually does not stop with a relation between the state and the municipality; rather the accountability extends to an obligation towards the users of services. “Internally”, politicians also delegate tasks, goals and resources to political departments, municipal corporations and other associations to deliver on the behalf of the politicians. But the political committees and municipal corporations are not solely accountable to

the political leadership; they interact directly with the service user and are often supervised by state-controlled authorities. Complex accountability relationships arise from the fact that politicians are often both “agent/accountee” subject to the oversight of multiple stakeholders and “principal/account-holder” vis-à-vis the internal political committees and municipal corporations (cf. Schillemans and Busuioac, 2014). Sometimes it might not even be clear who the relevant stakeholder is.

The complexity of stakeholders and the internal and external accountability relationships imply that municipal financial reporting must be able to report back on a one-to-one accountability relationship, but also employ a more general disclosure approach. Coy and Dixon (2004) argue that public accountability seeks justice, truth and fairness in reporting that requires open disclosure to all stakeholders, who have an opportunity to provide criticism. Coy and Dixon (2004) further point out that the “problem” with financial accounting reporting is that the reports may conceal more than they reveal. Financial information can be manipulated in order to appear (more) efficient or to influence real economic decisions on grants, budgets or prices. These manipulations can be driven by internal or external motives (Cassel, 2014). The information might be influenced by managers or politicians who are keen to justify themselves and avoid issues that have caused them embarrassment, although it is precisely such issues that should be the concern of public accountability.

From a general outset, financial accounting regulations provide the ground-level framework to secure reliable and relevant information (Libby et al., 2015). They are rules or principles that municipalities follow when recording, measuring and presenting financial and non-financial information. Following regulation is supposed to result in accurate descriptions of the financial result and position of the municipality in a manner that is understandable and comparable with other municipalities. Regulation may also help the reporting entity to know what to disclose, as regulation sets the minimum requirement, which can be of help in a complex stakeholder world.

Thus, accounting regulations are supposed to secure both reliable and relevant financial reporting to support decision making, accountability and in extension good governance of public organisations (cf. Bovaird and Löffler, 2003; Biondi and Lapsley, 2014). Seen from the perspective of the intended purpose of financial regulation in the public sector, without a reasonable level of compliance, decision-making and accountability might be hindered (Cohen and Kaimenakis, 2011). Since accounting standards alone do not seem to

secure compliance, an audit function is conventionally suggested to have that role. As a link between the reporting entity and the stakeholders, it is the auditor's general function to secure the quality of the accounting information (Cassel, 2014).

Ideally, the auditor shall scrutinise, judge and express an opinion on the quality of the accounting information regarding whether the information is usable for its purpose – decision-making and accountability. Without this scrutiny there is an increased risk of poor accounting quality, policy drift and that the reporting organisation will abuse the information advantages and power of trust. Hence, the audit should protect the stakeholders and contribute to a trustful relationship between the auditee and the organisation's stakeholders relying on the financial information. Also from the audit perspective, accounting regulation is essential, since it gives the audit function a definition of accounting quality and a guideline on which they can base their judgement.

Jones and Pendlebury (2004) also suggest that accounting standards and auditing together can provide implicit assurance of the underlying accounting used internally in the municipality, as they indirectly also verify that the internal management is based on reliable accounting information. This is especially important since “internal” public sector decision-making and management must be based on accounting data that can be externally reliable and transparent. The auditor's work and audit report can serve as a proxy of the quality of the accounting and can provide legitimisation and trust to an entity that has fully complied with accounting standards or distrust if the entity does not comply (Cassel, 2014).

To end this description of the role of accounting, regulation, auditing and compliance one can say that the move from cash accounting to accrual accounting further highlights the importance of accounting regulation, auditing and compliance in municipal organisations. Accrual accounting is intrinsically characterised by the existence of possible alternative criteria in evaluating assets, liabilities, revenues and expenses. To some extent local judgement and accounting decision-making is built into the system, essentially because it is supposed to promote more accurate accounting, but it also opens up potential for arbitrariness and manipulation of accounting information. Thus, regulation, auditing and compliance should reduce the subjectivity and discretionary power of preparers of financial statements and limit the possibility of adopting window-dressing policies under an accrual accounting reporting regime (Brusca et al., 2015). However, whether or not

the system works in reality is essentially an important empirical question (cf. Zimmerman, 1977).

3.2 Accounting compliance and audit cost research

3.2.1 Introduction to accounting compliance and audit cost research

The empirical interest in public sector accounting practice, compliance and audit cost started in the early 1980s. These studies were essentially conducted before or at an early stage of the new public management era and before the widespread diffusion of accrual accounting in the public sector. Further, the studies conducted during the 1980s and early 1990s were mainly conducted in the USA (Ingram and Copeland, 1981; Baber, 1983; Ingram, 1984; Evans and Patton, 1987; Ingram & DeJong, 1987; Rubin, 1988; Cheng, 1992; Copley 1991; Ward et al., 1994; Allen & Sanders, 1994) and England (Jones and Pendlebury, 1991; Chandler and Cook, 1986), even though there are examples from other countries (Lin, Baxter and Murphy, 1993; Jegers and Houtman, 1993). Essentially there was both a professional and academic concern about the quality of financial accounting and auditing procedures. Several studies from this period also identified profound non-compliance and pinpointed poor accounting standards, poor accounting competence and poor audit quality (Ingram and Copeland, 1981; Jones and Pendlebury, 1991; Chandler and Cook, 1986; Copley 1991). Then came the accrual revolution.

Even though researchers started to take an interest in the implementation of accrual accounting in the public sector during the 1980s (see, for example, Bergevärn and Olson, 1989, for a Swedish reference), there were at the turn of the century very few studies that had structurally examined the implementation of public sector accrual accounting reforms. One such early evaluation is Christiaens' (1999) Belgian study, which is unusual since there is also a published follow-up study by Christiaens and van Peteghem (2007). Other evaluations of compliance/reporting quality found in the scientific literature are reported from Australia (Ryan et al., 2002), England and Wales (Jones and Pendlebury, 2004), Portugal (Da Costa Carvalho et al., 2007), Sweden (Falkman and Tagesson, 2008) and Greece (Cohen and Kaimenakis, 2011). All these studies document poor compliance and disclosure quality.

Sweden is not the golden exception. Recent studies by the Council of Municipal Accounting investigated the actual compliance with the accounting law and standards (reported in Falkman and Tagesson, 2008, and further analysed by Tagesson and Eriksson, 2011). The overall results showed that compliance with accounting regulation in general was poor; on average, the municipalities deviated from almost one-third of the Standards. Falkman and Tagesson (2008) also found that compliance improved only slightly over time, which was also the case in other countries (Ryan et al., 2002; Christiaens and Van Peteghem, 2007).

The situation described in these articles indicates that many countries, including Sweden, had implemented accrual accounting regimes with weak institutional arrangements in the form of inconsistent and unclear standards, inadequate auditing requirements and absence of sanctions (Christiaens, 1999; Da Costa Carvalho et al., 2007; Falkman and Tagesson, 2008; Cohen and Kaimenakis, 2011). Combined with deficient competence among the preparers and lack of true political commitment and support, the situation has allowed individual public sector entities to adopt very diverse accounting and auditing practices.

The implementation of accrual accounting has also turned the spotlight on the audit costs of municipal organisations (Johnsen et al., 2004; Cohen and Leventis, 2013) in order to better understand the role of auditing. However, studies are very scarce (see Hay, 2013) and there is no previous study on audit costs in Sweden. However, Tagesson and Ericsson (2011) picked up this auditing thread and investigated the role of the professional municipal auditors; they argue that the institutional arrangements of the audit of Swedish municipalities do not facilitate and support the implementation of accounting standards. Their study demonstrate that the “auditees are more aware of the new accounting standards than the auditors” (Tagesson and Ericsson, p. 282), which indicates quite severe problems if auditing is supposed to support compliance.

3.2.2 Explaining accounting compliance and audit costs

In terms of theory with the ambition to explain accounting and auditing practices, the 21st-century literature on accounting compliance (Christiaens, 1999; Christiaens and van Peteghem, 2007; Ryan et al., 2002; Da Costa Carvalho et al., 2007; Tagesson, 2007; Falkman and Tagesson, 2008; Cohen and Kaimenakis, 2011) and audit costs (Johnsen et al., 2004; Giroux and Jones, 2007; Lowensohn et al., 2007; Cohen and Leventis, 2013) at municipal level is mainly based on past research combined with factors derived from the local setting. But when theoretical perspectives are referenced, then it is mainly agency theory and institutional theory (Christiaens, 1999; Johnsen et al., 2004; Tagesson, 2007; Falkman and Tagesson, 2008; Cohen and Leventis, 2013).

Basic agency theory starts from the situation where a principal has delegated power and responsibilities to an agent and both parties act based on self-interest (Jensen and Meckling, 1976). The relationship is described as a model of conflict, because the agency theory assumes a goal conflict between the two parties in a contract situation. The agency control problem arises because the agent normally has the advantage of better information (information asymmetry) than the principal. If the agent is about to make decisions that influence the distribution of wealth between the agent and the principal, then the principal has a control problem. What the principal can do is to influence and constrain the agent through different governance techniques, controls and sanctions (ex ante and ex post). Monitoring through accounting and auditing are two such important measures (Copley, 1991). Principals are, however, likely to accept some level of agency freedom since monitoring and sanctioning is associated with considerable cost.

Translated to the public sector, the basic assumptions of agency theory (goal conflict, information asymmetry, utility maximising and costs of monitoring) are essentially the same (Schillemans and Busuioc, 2014), even though the complexity increases. The public sector complexity lies in that there are multiple non-profit goals and aims, many different stakeholders with quite different agendas and many layers of agency relationships between the stakeholders, the politicians and the public managers (Zimmerman, 1977; Pina et al., 2009; Schillemans and Busuioc, 2014).

Accounting practices are seen as important since they may influence allocations and reimbursement systems, and thus have wealth effects for stakeholders. If accounting has economic implications for interested parties,

then they will try to influence or control the outcome. Since the agent, the one that may influence accounting directly, acts based on self-interest, it is strongly assumed that the agent will choose certain accounting methods in order to gain economic benefits. Further, as discussed before, it is particularly stressed that accounting and auditing practices produce monitoring information on performance to be used for accountability purposes in municipalities. From the outset of agency theory it is argued that self-interested and rational agents are expected to resist demands for accountability. Since agents have informational advantages they will prefer secrecy in order to exploit the possibilities without interventions (Schillemans and Busuic, 2014).

In terms of accounting compliance, agency theory predicts that public sector entities will opportunistically deviate from accounting regulation and avoid transparency if this will substantially benefit politicians or managers (Zimmerman, 1977). This implies that accounting choice is conscious, deliberate and active, with the implications of the accounting outcome in mind. However, Feroz et al. (2007, p. 6) warn that one should not assume, when applying agency theory in public sector settings, that self-interest and the consequences of accounting and auditing practices are purely economic; rather, the self-interest can also be political. Politicians and public managers are dependent upon stakeholders and cannot fully ignore their wishes and expectations (Tagesson, 2014). Thus, important stakeholders and resource providers, such as voters, state governments, media and creditors, may demand and use audited accounting information in order to inform themselves, control and claim accountability. Further, if the agent is under pressure or facing the risk of political or economic sanctions, one response can be to supply high-quality accounting information and audit assurance in order to signal responsible management (Evans and Patton, 1987; Copley, 1991).

Research also indicates that a great deal of accounting and auditing practices in the political arena can be explained by the need to consider voters, political competitors and other important stakeholders in order to gain support, avoid sanctions and stay in office (Zimmerman, 1977; Evans and Patton, 1987; Baber, 1990; Copley, 1991; Collin et al., 2009; Baber et al., 2013; Bolivar et al., 2013). Thus, from an agency theory perspective, the level of accounting compliance will differ according to variations in stakeholder demand for monitoring information and the perceived need of agents to signal accountability. From this perspective, accounting regulation and auditing

have an important role in infusing sanctions and political cost into the accounting reporting and accountability system in order to secure compliance.

In contrast to agency theory, institutional theory de-emphasises personal utility maximisation, focusing on how contextual factors beyond the organisation influence accounting practice. Institutional theory views organisations as operating within a nexus of norms, values and taken-for-granted assumptions that influence practice. It is claimed that organisations adopt structures and practices that are accepted and considered legitimate within the organisational field as a response to different pressures and impulses from their institutional environment (Meyer and Rowan, 1977; DiMaggio and Powell, 1983; Oliver, 1991). Important within institutional theory is the concept of isomorphism. Isomorphism is the classification of institutional pressures put forward by DiMaggio and Powell (1983) that will influence the institutionalisation of structures and practices within organisations. These can be coercive, mimetic and/or normative.

Accounting practices are seen as typical practices influenced by institutional isomorphism (Mezias, 1990; Carpenter and Feroz, 2001; Collin et al., 2009). Financial accounting can, for example, be dictated by regulation, implying little space for the decision-maker to make a “choice”; it is rather a question of execution or a constrained choice (Carpenter and Feroz, 2001). The influence of accounting regulation is obviously also dependent upon the regulation itself. As Tay and Parker (1990) explain, accounting regulation can be strict or less strict in terms of the normative strength of the regulation (legislation, standards, recommendation) and in terms of the clarity and precision of the regulation. Less-strict accounting regulation is, according to Tay and Parker (1990, p. 73), associated with higher levels of non-compliance. Typically, state governments generally legislate municipal activities and impose accounting and auditing requirements, which is a strong signal to comply. Governments also supply municipalities with resources, which might put further pressure on the municipalities to act according to legislation in order to secure future resource supply from the government (Falkman and Tagesson, 2008). State legislation, accounting regulation, and resource supply are examples of *coercive pressure* that results from both formal and informal pressure imposed on an organisation by legal, hierarchical or resource dependence (Carpenter and Feroz, 2001; Collin et al., 2009).

Closely related to coercive pressure, in fact so close that is often hard to empirically separate them (Modell, 2002), is *normative pressure*. Normative isomorphism stems from environmental pressure for transformation from stakeholders such as financial institutions, scholars and multilateral organisations, as well as from specialised groups within a profession who try to define the conditions and method of work (Collin et al., 2009). Typical examples of professional groups mentioned in the literature are accountants (Carpenter and Feroz, 2001) and auditors (Falkman and Tagesson, 2008). Audit firms and their employees represent “accounting expert knowledge” and it is their job to scrutinise and influence their clients’ accounting practices. As such, auditors are a typical example of a “factor” that may influence practice both coercively and normatively (Tagesson, 2014). Other important normative accounting practices might stem from accountants and their professional accounting organisations and from industry associations.

When accounting regulation is not distinct or when auditors are elusive then reporting entities in the public sector may choose to imitate other organisations. *Mimetic* actions are taken under uncertainty because they may reduce the possible choices and by adopting the same practices as those organisations that are seen as successful within their organisational field, organisations hope to perform successfully and appear legitimate (DiMaggio and Powell, 1983).

In the long run, organisations will, due to isomorphism, eventually conform, for example to accounting regulation, if they are rewarded to do so through increased legitimacy, resources and survival capabilities (cf. Scott, 1987). Both adherence to accounting standards and assurance from professional public sector auditors have been identified as providing the means to signal political commitment to transparent, accountable government and thereby provide the possibility of confirming the political legitimacy of those who govern (Funnell, 2015, p. 97). From the perspective of the preparer of financial statements, accounting regulation and audit work is of course a central institutional force that one would presume would eventually lead to compliance. However, as pointed out by Bergevärn et al. (1995), in a society there can be multiple and competing accounting norms (other than those written down in laws and standards) and organisations do not always adapt to institutional pressure (Oliver, 1991). This is perhaps also dependent upon how strict the accounting regulation is.

Whether or not an organisation will respond to accounting regulation will probably depend on how strong and deeply rooted current practices are and

the nature and context of the institutional force. The first case is institutional stickiness, imprinting (Scott, 1987), which is when “the old way” of recording, measuring and reporting has gained an objective presence (Carpenter and Feroz, 2001). If practices are deeply institutionalised they become hard to change and new accounting regulation might have difficulty in affecting practice. Some important actors might also, intentionally or unintentionally, overrule accounting regulation. This can be exemplified when state government or influential industry associations suggest accounting solutions that go against accounting regulation. If the municipality has a strong dependency on the specific organisation then that practice might be selected, even though it implies deviation from accounting regulation.

Rational self-interest might also thrive in an institutional environment. Institutional theory suggests that institutions constrain, not erase, self-interest (Feroz et al., 2007). Oliver (1991), for example, suggests that when institutional pressure for conformity, or in this case accounting compliance, strongly conflicts with internal political interest, culture or image then organisations might partly or totally choose to avoid conformity. According to Oliver (1991), organisations and their agents may respond strategically to institutional pressure for change in several ways – ranging from passive conformity, compromise and avoidance, to defiance and manipulation. This suggests that municipalities can adopt and comply with accounting regulation partly or with minimum of effort, or alternatively even try to influence the standard setter through, for example, the industry association. How organisations actually respond depends on who is exerting the institutional pressure, on how dependent the focal organisation is on the organisation that exercises the institutional pressure and on the built-in control mechanism.

The discussion so far implies that agency theory and institutional theory together paint a picture of accounting choice or practices having rationality, albeit not the same rationality, and that it is conscious to some extent. But institutional theory also stresses the more symbolic or seemingly irrational aspects associated with accounting. For example, it is plausible that the accounting decision-maker sometimes lacks comprehensive information or understanding of the actual implication of the accounting choice made. Further, imprinting suggests that accounting practices might be better described as institutionalised routines not subject to choice since they are perceived as “obvious” (cf. Mezas, 1990). Certainly there can also be situations when the reporting entity does not even know that an accounting

routine should be put into place; “non-existent” accounting practices also stand for something, but there is not always a conscious choice behind it. In other words, when explaining accounting compliance as an accounting outcome or accounting practice, deviations might be the result of sheer lack of understanding and knowledge and not a deliberate choice.

However, previous research suggests that variations in accounting compliance (Da Costa Carvalho et al., 2007; Tagesson, 2007; Falkman and Tagesson, 2008; Cohen and Kaimenakis, 2011) and audit costs (Johnsen et al., 2004; Giroux and Jones, 2007; Cohen and Leventis, 2013) can be explained by factors related to the institutional, political and economic environment of the municipalities.

3.2.3 Explanatory factors: the common basis

Glaum and Street (2003) argue that several of the factors that have been shown to be associated with overall level of disclosure are also significantly associated with the extent of compliance in the private sector (p. 69). Turning to the public sector, the equivalent factors explaining disclosure are: municipal size/population, the wealth of its citizens/economic input, government grants, political competition and the financial condition of municipalities (Bolívar et al., 2013, p. 561). These factors are also common in both recent municipal accounting compliance research (Christiaens, 1999; Christiaens and Van Peteghem, 2007; Da Costa Carvalho et al., 2007; Falkman and Tagesson, 2008; Cohen and Kaimenakis, 2011) and audit cost research (Johnsen et al., 2004; Giroux and Jones, 2007; Cohen and Leventis, 2013). With reference to Bolívar et al. (2013), these factors can be described as constituting the common basis of existing theory.

The municipal inhabitants are seen as the major stakeholders of municipalities as they are voters, service users and resource providers (Zimmerman, 1977; Baber, 1983). In almost all municipal accounting compliance and audit cost research it is expected that the sheer difference in population will induce differences. The argument put forward in this thesis is that municipal population is an important attribute of the political environment as an external pressure for accountability, information and monitoring. With increased population there are essentially more individual stakeholders, more resources are at stake and the distance between politicians and citizens increases. It was also suggested early in agency theory-based

research that differing municipal size, with reference to population, could positively influence accounting compliance and audit supply/cost (Baber, 1983; Evans and Patton, 1987).

To some extent Zimmerman (1977, p. 110) deny this relationship, since voters, according to Zimmerman, have little use of municipal accounting information and understanding the information is associated with high information processing costs. Thus the major principal will not demand high-quality accounting. Zimmerman (1977) also describes that it can be in the politician's best interest to disclose financial information in a highly disorganised fashion, thereby incurring information processing costs. This is also one of the main critiques of financial reporting in the public sector today, that the reports are ill-organised, non-compliant and presenting conflicting information (Christiaens and Neyt, 2014).

I believe that it is reasonable to assume that the inhabitants or voters do not in general directly influence specific accounting or audit practices, but that political and/or managerial levels might feel the generally higher level of pressure and control, which might create a general atmosphere that supports accounting compliance. It is also important to recognise that municipal size, as in the number of inhabitants, has been used in many theoretical ways – as a measure of organisational complexity (Ingram, 1984; Rubin, 1988), organisational capacity and competence (Christiaens and Van Peteghem, 2007), and visibility to the public, media, the government and other controlling institutions (Falkman and Tagesson, 2008). These underlying drivers might also be relevant depending on the circumstances, which highlight the importance of analysing the statistical results.

Generally, size has a positive effect on financial disclosure (Bolivar et al., 2013). However the studies evaluating the compliance to accounting standards remain inconclusive. More specifically, Christiaens (1999) and Falkman and Tagesson (2008) exposed a positive influence on compliance, but Da Costa Carvalho et al. (2007) and Cohen and Kaimenakis (2011) found a negative one. In municipal audit cost research, the results are more consistent, as most studies have found a positive association between size and audit costs (Johnsen et al., 2004; Giroux and Jones, 2007; Cohen and Leventis, 2013).

Regardless of the number of citizens, the populations of municipalities might have different characteristics and preconditions, which in extension can induce differential strengths in the demand for accountability. In this thesis

and in past research one such factor is economic input. Economic input is about funding and funding is in theory related to demand for accountability and transparency in public sector organisations (Jensen and Payne, 2005; Bolivar et al., 2013). It is generally expected that a relatively higher economic input leads to relatively higher stakeholder pressure on the political system. In the literature, the income level (citizens' wealth) or tax rate are considered as different aspects of citizens' funding of municipal activities. In this thesis fee level is also added, since compliance is investigated in fee-funded services. High tax rates or fee levels are also politically sensitive, which might create incentives to signal credibility and efficiency in the use of resources (Ward et al., 1994). In recent research there seems to have been few attempts to include tax base or tax rate in municipal accounting compliance or audit cost research.

The state government is also considered as an influential stakeholder (Copley, 1991; Ward et al., 1994; Feroz et al., 2007). Central government legislates, delegates and provides resources through government grants, which influence municipal behaviour since the government expects adherence and the municipalities are dependent upon government-distributed resources. The influence of the government on municipalities is usually analysed against the dependence on government grants (Bolivar et al., 2013; Da Costa Carvalho et al., 2007; Falkman and Tagesson, 2008). High dependence on grants implies increased monitoring demand from the government and increased need to signal appropriate management of given grants. Even though Swedish municipalities have the right to levy their own taxes, municipalities are significantly dependent on government grants (Falkman and Tagesson, 2008). This is because the central government has implemented a tax equalisation system, popularly called the "Robin Hood" tax, which implies that municipalities with a very good tax base have to transfer money to the central government, which the central government will then redistribute to municipalities with very low tax bases. However, in the study by Falkman and Tagesson (2008), the reliance on state subsidies seemed to have a negative effect on compliance in the Swedish municipal setting, which is the opposite result to that obtained by Da Costa Carvalho et al. (2007). Similarly, efforts in previous audit cost research have not been able to establish clear results, even though Cohen and Leventis (2013) found a negative effect on audit costs.

Trying to explain accounting and auditing practices in municipalities by political competition (Baber, 1983; Ingram, 1984), political preference

(Johnsen et al., 2004) and governing coalition (Falkman and Tagesson, 2008) has been important in efforts to adjust the models to the political setting. Important since it is an explicit consideration of the political organisation where accounting and auditing practices evolve. Political competition builds on the idea that politicians seek to obtain as many votes as possible. The greater the political competition, the weaker the politician's position relative to the stakeholders and, therefore, the better the monitoring information that must be provided (Evans and Patton, 1987).

Again, as with the population factor, it is possible that political competition creates an atmosphere of increased political risk, where any mistakes can be used by the opposition. Thus, the political risk level might influence the political system to increase the level of auditing and effect adherence to accounting regulation, in order to reduce the political risk and appear responsible in the eyes of the voters (Cheng, 1992). However, it is also suggested that political competition creates ambiguity and make the majority parties reluctant to provide quality accounting information that could be used by their political opponents against them (Johansson and Siverbo, 2009). Few studies of accrual accounting regimes have included political competition in accounting compliance research (Falkman and Tagesson, 2008, found no effect) or audit cost research (the results of Cohen and Leventis, 2013, indicated a positive influence on audit costs). The factor is also considered as noisy (Ward et al., 1994) and very context-dependent (Bolívar et al., 2013; Cohen and Leventis, 2013).

Financial condition is suggested to induce a need to signal financial credibility vis-à-vis external stakeholders – the citizens, the central government and creditors – in both accounting compliance research (Ingram, 1984) and audit cost research (Baber, 1983). Financial condition, as the level of debt, is normally positively associated with providing greater financial information (Bolívar et al., 2013) or audit effort (Giroux and Jones, 2007). However, the debt factor has been insignificant in trying to explain compliance in accrual accounting settings (Christiaens, 1999; Christiaens and Van Peteghem 2007; Cohen and Kaimenakis, 2011). The other side of a municipality's financial condition is its financial strength. Studies have tried to link the relative financial strength to compliance, with inconclusive results. Christiaens (1999) did not detect any influence, but the results of Da Costa Carvalho et al. (2007) came out positively, while the opposite conclusion was drawn by Cohen and Kaimenakis (2011). The empirical research on municipal audit costs has not documented a correlation between financial

performance and audit costs (Giroux and Jones, 2007; Cohen and Leventis, 2013).

The presentation of the variables municipal size/population, the wealth of its citizens/economic input, government grants, political competition and the financial condition of municipalities was motivated by the fact that they constitute a common basis in past research. One part of this thesis is to evaluate these factors against the Swedish setting of public utilities (accounting compliance) and municipalities in general (audit costs), which has not been done before. Still, several other variables have been investigated in past research regarding accounting compliance and audit costs. For audit costs, these factors relate to the audit risk, complexity and market and will not be discussed further here. Paper 4 provides a thorough account of these factors.

Concentrating on accounting compliance, other factors have for example been the support by consultants, training, experience, educational background (Christiaens, 1999; Christiaens and van Peteghem, 2007), political support (Cohen and Kaimenakis, 2011), urban areas and the general compliance level in the district (Da Costa Carvalho et al., 2007) and time (Christiaens and van Peteghem, 2007; Falkman and Tagesson, 2008). These factors have not formed part of this thesis, but might be relevant to explore further in future research. Under the next heading the discussion will continue with factors that this thesis explores in order to extend current knowledge about accounting compliance at the municipal level – factors related to municipal reforms and governance.

3.2.4 Deregulation, governance forms, audit firms

The introduction of accrual accounting has not been an isolated phenomenon; rather it has been part of a wider reform package (NPM) consisting of a broad set of financial, organisational and managerial reforms (Hood, 1995; Argento et al., 2010). The development can be exemplified by the introduction of competition in monopoly markets, outsourcing, restructuring into municipal corporations, and an emphasis on full cost accounting, pricing, indicators and auditing (Lane, 2011; Groot and Budding, 2004; Johnsen et al., 2004; Saliterer and Korac, 2013).

These reforms and governance measures may alter, replace or introduce incentives and/or institutions that might influence accounting practice and

compliance. There is also some empirical evidence that public sector governance forms and structures influence financial accounting compliance (Giroux and McLelland, 2003; Tagesson, 2007) disclosure (Bolívar et al., 2013), cost accounting practices (Groot and Budding, 2004) and use of performance indicators (Saliterer and Korac, 2013). However, following Saliterer and Korac (2013, p. 515) little attention has been paid in quantitative accounting research to the influence of municipal governance on accounting practice.

A central theme when reforming the public sector in Sweden and elsewhere has been the central government's ambition to *deregulate* public monopoly services, especially public utilities (Lane, 2011, p. 46). Swedish municipal waste management has been influenced by this reform measure and can today choose to be active or not on the *competitive market* for industrial waste. The relevance for this thesis is that competition is a powerful contextual factor affecting both organisational design and performance (Geiger and Ittner, 1996).

Economic agency theory underlines that market forces influence accounting practices if there are costs or benefits associated with disclosure of information produced by the selected accounting technique (e.g., Cormier et al., 2005). From this perspective, the "costs" are associated with the loss of competitive advantage, a risk that will create incentives to be less transparent. But being publicly owned and active in a competitive market is sensitive. Municipal law generally states that municipalities are not to engage in commercial activities (Swedish Competition Authority, 2008) and the mere suspicion of misconduct might result in complaints from competitors and attract attention from the mass media, politicians and competition authorities. In order to avoid political costs, transparency, compliance and accounting techniques that reduce the risk of sanctions and negative attention might be preferred (Milne, 2002). Institutionally, attracting attention from central government politicians, media and competition authorities can also put coercive and normative pressure on the organisation, which in turn creates a need to appear legitimate.

A major theme has also been the implementation of new organisational forms (Argento et al., 2010) – as described in chapter 2, a profoundly influential development within the Swedish water, sewerage and waste management sectors. These municipal governance decisions on organisational forms infuse different institutional factors and different agency relationships into the traditional municipal sphere. In Sweden, municipal corporations are subject

to both private sector and public sector laws (Argento et al., 2010), but in terms of accounting, the regulation is private. The relevant difference is that there are potential sanctions for misstatements and the professional corporate auditors have the means to make remarks and force their clients to comply with regulations (Tagesson, 2007). From the institutional viewpoint, the coercive and normative pressures are predicted to be stronger for municipal corporations than for municipal administrations. However, historically and institutionally, municipal corporations also have a business image and an economic orientation where the influence of politicians is limited (Smith, 2012). Being its own entity, corporations might be distanced from the municipal core which in extension can lead to a lack of institutional understanding and competence regarding the implications of specific public sector regulation. In this thesis, the requirement of full cost accounting reporting and application of the overcharge principle exemplifies this aspect. This lack of understanding and competence might be found at board levels, executive levels and among corporate auditors not specialised in public sector regulations.

Cooperation among public sector organisations is increasingly important in the management of resources in welfare systems (Argento et al., 2010). Organisational mergers among municipalities imply regionalisation and a multiple “ownership” structure. In agency theory it is proposed that opportunistic management behaviour and conflicts of interest between agents and principals are more likely to occur in organisations with a dispersed ownership structure (cf. Broberg et al., 2010). Thus, municipal cooperation might therefore create a need among “the owners” to require high quality accounting information in order to be able to monitor efficiency and make pricing decisions (which is the responsibility of the municipal council in Sweden when it comes to water, sewerage and waste management). Accounting compliance might be indirectly supported.

Another form of cooperation is cross-sectoral cooperation. In this thesis, the relationship between water and sewerage management and waste management is of particular interest. This is because the discussion in Sweden about how to interpret and apply the cost price principle has been more active within the water and sewerage sector (Malmer, 2003; Tagesson, 2007). Further, the institutional framework supporting the cost price principle (special law, special court, court cases) is stronger for the water and sewerage sector. If these two services are coordinated and share financial accounting functions, this can strengthen the understanding of the meaning of the cost

price principle and support accounting compliance. Theoretically, this is about how accounting practices diffuse through inter- or intra-organisational imitation and learning (cf. Haunschild and Miner, 1997; Chandler and Hwang, 2015).

Learning and specific institutional competence might also be enhanced within specialised organisations. A major feature of the reforms across the public sector has been to disaggregate larger organisations into more focused units (Walker and Andrews, 2013). In the case of Sweden, this has to a large extent been done through the creation of “one service” municipal corporations or through the geographical merging of municipal services into larger units (Argento et al., 2010). These organisations can be expected to gain superior knowledge of the business at hand and to be more familiar with specific accounting regulation.

Turning to the external market for audit services, the Swedish Association of Local Authorities owned its own audit firm (Komrev) until the 1990s. In the mid-1990s Komrev was acquired by PwC, which also at the same time opened up the market for municipal auditing. Just as in other Nordic countries (Johnsen et al., 2004), municipalities started to procure audit on the market. The work of auditors and their organisation aims to secure a reasonable level of compliance (Libby et al., 2015) and auditors can as a professional group, commonly with legal backing, exert both coercive and normative pressure on their clients to comply with accounting regulation (Tagesson and Eriksson, 2011). It is, however, argued that there might be a structural diversity of auditor quality on the market (Copley, 1991). This variation in quality can be due to the effort and measures that audit firms take in order to secure audit quality and promote their reputation (Copley, 1991), but it can also be related to different history, culture and client base (Collin et al., 2009). These differences in audit quality might be reflected in different audit costs and levels of accounting compliance. The argument has some merit, since the overall level of compliance has empirically been shown to be associated with the engaged audit firm in both private sector (Glaum and Street, 2003) and public sector accounting research (Falkman and Tagesson, 2008; Cohen and Kaimenakis, 2011).

To summarise, this thesis adds to current knowledge by investigating how deregulation and market, municipal governance forms and structures and engaged audit firms influence accounting compliance. If these factors influence accounting compliance, then understanding these relationships

becomes important when discussing heterogeneous practice and efficient accounting regulation.

Chapter 4 – Results and discussion

In this chapter the results of the four papers are analysed together, in order to integrate the findings. The chapter will concentrate on the major themes and examine the more significant relations between factors and accounting compliance/audit costs. To begin with, in order to analyse the overall results of the four papers, it is worth recapitulating a few features of the empirical setting.

4.1 The accounting and auditing context

The municipal politicians have a “dual position” in the Swedish municipal accountability structure, being accountable both to their multiple stakeholders and “principal” vis-à-vis the internal and external municipal committees and organisations. In this dual role, politicians might be influenced by both external and internal pressures and demands for control, transparency and accountability.

One overall feature of Swedish municipalities is the combination of politicians with a strong institutional position and a “softer” regulation of municipal accounting and auditing. The council approves the annual reports but is not an audit object. Further, the responsible politicians of the municipal board and the executive managers do not face any sanctions for misstatement. The politicians also have by law the opportunity to influence the resource allocation to the municipal audit, which casts doubts about auditor independence and quality. Thus, there is room for discretionary decisions on accounting and auditing in municipalities. A further feature of the accounting and audit context is the institutional freedom of municipalities and their political/managerial leadership to make governance decisions on organisational forms and structures (market, corporations, federations, outsourcing etc.). These decisions on organisational forms and structures might alter, replace or introduce new institutional, political and economic

forces, which, by extension, might influence accounting practice and compliance.

A distinctive feature of the accounting context of the water and sewerage sector and the solid waste management sector is their respective special laws regulating the pricing of their services. The two laws have the same regulation of the cost price principle, but the difference is that the Public Water Service Act has an explicit requirement for full cost accounting reporting, while the same requirement for the solid waste management sector is only implicit. A similar distinction can also be made between municipal accounting regulation and corporate accounting regulation. These two regulatory frameworks have similar standards for revenue recognition, but the standards for the municipalities include detailed guidance on revenue recognition against the cost price principle, which does not exist in the corporate accounting standards. Further, there is also in general a stronger institutional framework related to the cost price principle (special legislation, court cases, debate) within the water and sewerage sector. In the words of Tay and Parker (1990), there are differences in strictness of regulation regarding both legal support and explicitness in formulation. The results of this thesis suggest that these features have several implications.

4.2 Empirical findings

Two of the papers investigated the application of full cost accounting reporting (papers 1 and 2). It was found that most of the principals of the water and sewerage operations had to some extent produced a basic full cost accounting report, including at least an income statement and a balance sheet for the financial year of 2010 (paper 1). This was not the case for the solid waste management sector that had a very low compliance rate (42%), as measured for the financial year of 2013 (paper 2). However, when including more accounting items (the compliance index), the compliance outcome drops to 44% for the water and sewerage sector (2010) and to 34% for the solid waste management sector (2013). Observe that the data is not directly comparable, because it relates to different years and the compliance index of the water and sewerage sector included more items. Still, the outcomes do indicate that there are considerable differences between the two utility sectors.

Even though the two sectors have to some extent different historical and cultural paths, it is likely that it is the institutional framework that explains the overall differences in accounting compliance. The water and sewerage sector act under an explicit requirement for full cost accounting reporting and there is also a special court, several court cases and a historical debate dealing with the cost price principle. The same strict institutional framework does not exist for the municipal waste management sector, which probably implies less coercive and normative pressure within the sector. Another difference is that the water and sewerage sector is “contained” within the monopoly, while solid waste management has been influenced by deregulation. Such an economic force can make the organisations disinclined to report on the full cost of the legal monopoly. The result also indicates such an effect within the solid waste management sector (paper 2).

In paper 3 the application of the overcharge principle when recognising revenues within the municipal waste management sector was investigated. The empirical findings identify a large discrepancy between practice and accounting regulation. That only 30% of the organisations surveyed in this study recognise an overcharge as debt indicates a potential lack of normative pressure (legislation, clear standards, sanctions, auditing). However, the compliance rate is so low that it is also plausible that there is a general lack of institutional knowledge on how to interpret an overcharge in accounting terms within the sector.

Paper 4 on municipal audit costs reveals that there are considerable differences in audit cost between municipalities, which raises the question whether these differences are motivated by different audit effort in order to do the job, whether there is different audit quality reflected in the cost differences, and also whether audit costs are used to manage stakeholder relations.

4.3 Reflections on explanatory factors

In this thesis a distinction is made between factors mainly relating to the external environment, to the political and financial situation and to governance forms and structures. *External environment* organises external economic, agency or institutional factors (market, population, economic input and engaged audit firms). The *political/financial situation* structures

organisational factors related to the municipality's political power situation and financial situation (political competition and financial strength). *Governance forms and structures* relate to different organisational forms (municipal corporation, regional organisation, coordination and expert organisations). This approach enables an analysis of whether accounting compliance and audit cost depend on the external environment, the political/financial situation and/or the implemented governance forms.

4.3.1 Factors related to the external environment

External economic forces and stakeholder factors seem to influence both accounting compliance within the solid waste management sector and professional audit cost at the municipal level. Accounting compliance within the water and sewerage sector seems not to be influenced to the same extent or in the same way.

Municipal size, as in number of inhabitants, is the most dominant external factor in public sector accounting choice, compliance and audit cost research. The size factor is almost always significant, but not always in the same direction. The factor is, however, difficult to analyse since it is a proxy for many theoretical constructs (hypotheses) – organisational complexity, organisational capacity and competence, visibility to the public, media, the government and other controlling institutions. The argument in this thesis is that municipal size as in number of inhabitants (papers 1 and 4) or service users (papers 2 and 3) relates the variable closely to the major stakeholder of municipal organisations – the citizens (in various forms). Following this path, it was proposed early in agency theory that the number of citizens receiving municipal services paid for by their taxes influenced the quantitative level of demand for accounting information and audit.

Reflecting on the results of the four papers, size did not have any influence on accounting compliance within the water and sewerage sector (paper 1), while size did positively influence accounting compliance within solid waste management (paper 2). It might be possible that the difference detected in papers 1 and 2 is due to differences related to the institutional framework. The fact that the regulation of full cost accounting reporting is stricter for the water and sewerage sector might diminish the influence of size, but under circumstances of implicit regulation the influence of size becomes a potential factor.

When it comes to audit costs, it is argued in paper 4 that in a municipal setting where politicians can influence audit costs, the positive influence of size on professional audit costs might very well be a result of stakeholder influence instead of a measure of audit complexity. This influence is probably implicit or indirect in that it is probably a general atmosphere that affects the level of resources allocated to the audit function.

A related factor, measuring stakeholder influence, is the *economic input in the form of tax base, tax rate and fee levels*. The general idea behind the economic input is that a citizen's income, tax rates and fee levels are related to the demand for better services and more information about the use of the money paid. Similarly, and this is more an inward-outward relation, politicians of municipalities with high tax rates and/or high fee levels might want to signal accountability and control through accounting and auditing. Citizens' income level had a positive effect on full cost accounting reporting within the solid waste management sector (paper 2). However, fee level, which is a direct measure of the economic input of the direct stakeholder to the utility services, had only a weak (moderately significant) influence on the level of accounting compliance (papers 1 and 2) or no influence on the compliance regarding revenue recognition (paper 3). One probable explanation is that the charges for water and sewerage services and waste services are rather low and therefore do not provoke a significant demand for/need to signal accountability.

The audit cost study (paper 4) indicated a negative influence of citizens' income level and a positive influence of tax rate on professional audit costs. This might seem slightly contradictory since both measures are indicators of economic input. However, considering the Swedish tax equalisation system, an interpretation might be that municipalities that are dependent on outside help in the form of grants (low tax base) and/or high taxation feel a general pressure to appear accountable for the use of resources, which possibly also translates in to larger audit budgets.

Market competition as a factor influencing financial accounting compliance and transparency within the public sector has not been, to my knowledge, analysed before in accounting compliance research. In the private sector financial accounting literature, competition is predicted to hamper external transparency, since information can be used by competitors (Cormier et al., 2005). In a mixed public and private sector like Swedish waste management, transparency might also attract attention, since acting on competitive markets is a sensitive operation for municipal organisations. Municipal waste

management organisations active in the market for waste might want to avoid attention from competition authorities, media and central government politicians. By not reporting in a transparent way, the organisation might be able to fly under the radar. Alternatively, to be transparent and to comply with regulation might also be a way to avoid political costs or loss of legitimacy in this context. One can only speculate, but one significant result from the study of full cost accounting reporting within the solid waste management sector (paper 2) was that competition as a factor decreases the likelihood of full cost accounting reporting from those organisations. Hence, market competition had a negative influence on compliance and transparency.

Another economic market force is the *market for auditing services*, which was analysed in paper 4 in relation to municipal audit costs. This study did not indicate any branding costs or that the specialised audit firm could charge a premium. However, the results indicated that one of the Big 4 is associated with low audit costs. One possible explanation for this finding might be the strong focus on price and not audit quality as the predominant criterion among municipalities when procuring auditing (see, for example, Tagesson et al., 2015). However, it might still be possible that a certain firm is able to charge a premium (price per hour) and/or has been selected for signalling purposes. This is because the effect can be contained within the budget restriction, since the political auditors have the opportunity to order fewer hours. Thus, engaging a high-profile audit firm might not result in higher audit costs. The consequence might rather be fewer hours of auditing.

Continuing with the *engaged audit firm*, it has been suggested in research that audit firms and their employees coercively and normatively influence their clients to comply with accounting regulation. If audit firms have different levels of audit quality and/or different normative influence on clients, then the engaged audit firm might infuse variations in compliance within a particular sector. This is an interesting perspective, because if variations in compliance are related to the engaged audit firm, then the “audit function” itself is part of the compliance puzzle. In the study of full cost accounting reporting within the water and sewerage sector (paper 1), different levels of compliance were related to different engaged audit firms. No such influence was detected in the solid waste management sector, neither regarding full cost accounting reporting (paper 2) nor regarding revenue recognition (paper 3). Since the institutional framework surrounding the cost price principle is less strict within the municipal waste management sector, it

suggests that the issue is not even on the agenda when the auditor comes to visit. Thus, no variations dependent on audit firms appear. Vague or implicit regulation could imply less space and opportunity for normative pressure.

4.3.2 Factors related to the political or financial situation

The political and financial situation has been considered as an important factor influencing the political need to appear accountable (outward) and/or strengthen the control (inward), which in turn can influence accounting and audit practices. In line with previous research, there are no clear and significant results in this thesis regarding the influence of political and financial situations on accounting compliance and audit costs.

Political competition builds on the idea that politicians seek to obtain as many votes as possible and the greater the political competition, the greater the incentive to demonstrate to voters and stakeholders that they are responsible and credible. To not act with prudence or to deviate from regulation is also politically hazardous in a competitive situation, since it can be exploited by the opposing political parties. Political competition is important as it is one of the few factors in past research that is a direct consideration of the political organisation. However, the variable has been considered as noisy (Ward et al., 1994) and very context-dependent (Cohen and Leventis, 2013). There seems to be no clear pattern. What was found in this thesis was that accounting compliance (paper 1) and audit cost (paper 4) were negatively correlated with measures of political competition. Further, accounting compliance within the solid waste management sector was unrelated to political competition (papers 2 and 3). Thus, the results at least indicate that the potential need to signal responsibility and credibility seems not to be satisfied through accounting compliance.

The *financial condition* variable is included in the analysis of accounting compliance and audit costs because it is an integral component of the financial credibility of public administrations vis-à-vis external stakeholders. The financial condition can also influence the more internal reporting requirements and auditing practices in order to strengthen control. The financial condition of the municipality did not have a major impact in any of the studies of accounting compliance (papers 1, 2 and 3) or as a driver of audit costs (paper 4). One explanation might be the low litigation risk of Swedish municipalities since they have the right to levy taxes and are financially protected by central government. The results instead indicate that the pressure to signal or appear accountable through accounting and auditing

is probably more influenced by the municipal tax level. Further, water, sewerage and waste management are financed by user charges and represent a relatively small part of the total municipal economy. Thus, under less favourable financial conditions attention is probably directed towards larger budget items.

4.3.3 Factors related to municipal governance forms and structures

Three accounting compliance studies (papers 1, 2 and 3) investigated whether municipal governance forms and structures influence accounting compliance within the water and sewerage sector and the solid waste management sector. Indeed, it does seem that governance forms and structures alter, replace and introduce new factors and incentives that influence accounting compliance, but not always in the ways expected.

In the three studies on accounting compliance (papers 1, 2 and 3) it was expected that that the *legal form* of organisation would matter because the institutional pressures from the regulatory framework regarding accounting and auditing are greater for municipal corporations than for municipal administration. In the study of full cost accounting reporting within the water and sewerage sector, there was also a positive effect on accounting compliance if the service was organised as corporation (paper 1). The same influence did not materialise in the study of full cost accounting reporting within the solid waste management sector (paper 2) and regarding revenue recognition, the influence was actually negative (paper 3).

Reflecting on these differences, it is possible that it is, again, the stronger institutional framework related to the cost price principle (special legislation, court cases, debate) within the water and sewerage sector that explains the different outcomes. Further, regarding revenue recognition, there is no detailed guidance on how to apply the overcharge principle in the private sector standards as there is in the public sector standards. Thus, the knowledge of the overcharge principle might therefore be less developed among both preparers of accounts and auditors of municipal corporations. Under such circumstances, the historical and institutional business orientation of corporations, in terms of management and revenue recognition principles, might counteract compliance with the overcharge principle.

A further influential governance option is to merge services, such as solid waste management services, across municipal borders. *Regional*

organisations, in the form of corporations or federations, were expected to positively influence compliance regarding full cost accounting reporting, since governance from a distance would require better reporting. The factor turned out to be negatively related to accounting compliance in the solid waste management sector (paper 2). It might be that a regional solution creates an organisation distant from the “owners”, and if the service in question (waste management) does not rank high on the political agenda, the political interest in controlling the outcome from a distance might be weak. The regional organisations also tend to be larger, which might give them the power to resist control.

The studies on accounting compliance in the municipal solid waste management sector (papers 2 and 3) show that financial accounting practice – and in this case therefore also compliance – diffuse from one sector to another. To be *organised together* (as in the same financial department) with the water and sewerage sector had a positive effect on accounting compliance regarding full cost accounting reporting (paper 2) and revenue recognition (paper 3) within the solid waste management sector. This is in a way quite natural if the operations have the same financial department and political board/committee; practices within the solid waste management sector can be referenced against the practices within the water and sewerage sector, a sector with a stronger institutional framework related to the cost price principle. Still, it is an interesting example of how regulated financial accounting practices can also diffuse locally through imitation and learning, a process usually associated with management accounting change (e.g. Modell, 2002). This result is also interesting in relation to *expert organisations*. In paper 3 it was expected that expert organisations (so-called single-service organisations) would have better knowledge of how special laws and the cost price principle influence accounting. The factor was, however, not associated with compliance regarding revenue recognition. Thus, sector specialisation seems not be sufficient rather there needs to be a normative influence as well.

4.4 Summary of results and implications

To summarise, the low compliance rates found in the municipal water, sewerage and waste management sectors in Sweden is in accordance with previous research regarding municipalities in Sweden (Falkman and Tagesson, 2008) and in other European countries (Christiaens and van

Peteghem, 2007; Da Costa Carvalho et al., 2007; Cohen and Kaimenakis, 2011). An overall implication of these findings is that the very basic compliance information needed to build an accountability mechanism in relation to the regulation of the cost price principle is not there in all municipalities. Thus the possibility of stakeholders to inform themselves and execute accountability, and for the politicians of the council to make informed pricing decisions, is hampered.

All in all, the results also reveal that accounting compliance within the water and sewerage sector and the solid waste management sector are influenced a) by different factors b) in different ways by the same factors. This has implications both for research and accounting systems.

For research, with the aim of explaining accounting compliance in the municipal sector, this means that one needs to consider how different municipal segments relate to institutional factors and/or economic agency incentives. One municipal segment might or might not be influenced by a factor, while another segment might be differently influenced by the same factor. Further, there can be segments that are influenced by specific factors that are not relevant or present for other segments. A typical example from this thesis of this latter point is deregulation of municipal services introducing market competition as a factor, relevant for solid waste management sector but not for the water and sewerage sector. Thus, in order to understand heterogeneous financial accounting practices at the municipal level, some clues might be found at the segment level, as they are part of the bigger organisation.

A further complexity is that accounting compliance is dependent upon municipal governance forms and structures. Related to the segment discussion above, a consequence of municipal governance decisions on organisational forms is that if services are externalised to municipal corporations and/or federations, the accounting practices are also externalised. Seen from a stakeholder perspective, research needs to measure and analyse accounting compliance at the organisational entity level but also aggregated “above” the municipal administration level. A more heterogeneous organisational structure across municipalities increases the importance of analysing the consolidated level.

The influence of governance forms and structure also relates the compliance problem to reform initiatives, e.g. new public management. The critical literature within new public management research suggests that the

development has led to a more diversified and fragmented organisation of public services delivery and that these measures may have reduced or even removed information about accountability in relation to the external stakeholders. The results of this thesis do indicate that measures such as competitive market, organisational form and engaged audit firm make the accounting practices themselves diversified and fragmented, as accounting compliance varies along these measures. However, the impact is not always that the reform and governance measures lead to less accounting compliance or less transparency. Whether or not the information is actually used for accountability purposes is of course another question. “Drifting” principals are a known problem in the public sector (Zimmerman, 1977; Schillemans and Busuioc, 2014).

In the preceding analysis it has been stressed that the differences in institutional framework between the water and sewerage sector and the solid waste management sector, and between public sector standards and private sector standards, might explain some of the patterns found. Bergevärn et al. (1995) and Carpenter and Feroz (2001) suggest that institutions, especially in the form of accounting regulation, control and constrain accounting practice. However, if regulation is less strict in terms of legal backing or clarity then non-compliance can be expected (Tay and Parker, 1990). Under such circumstances an institutional space is created that opens up the possibility for actors within the accounting system to be affected by the wider context of economic, political and institutional forces that might potentially influence compliance. The studies provide some evidence of this effect, which is manifested mainly in two ways.

First, it seems that when the institutional framework is weaker and less strict, as it is for the solid waste management sector, then accounting compliance is influenced by economic and stakeholder factors (population, market, economic input). When the regulatory framework is stronger and stricter, then accounting compliance might be influenced by factors that are more closely related to accounting control through coercive and normative pressure. If there is a distinct regulation then the auditor and other controlling institutions can use this framework to build argument and put pressure on the reporting organisation. Further, audit firms might develop specific competences around the legislation, possibly leading to different audit quality. This latter relation was apparent in the study of the water and sewerage sector, with a stricter framework, where the engaged audit firm and the legal form of corporation influenced compliance rates. Further, since

neither the industry specialist nor the expert organisation had a positive influence on compliance regarding revenue recognition within the solid waste management sector (less strict framework), this suggests that it is perhaps not expertise *per se* that supports compliance – there needs to be a stricter framework as well.

The above discussion also relates to the results of the audit cost study. The politicians of the council have a strong position related to the municipal audit function as commissioner of the audit. The political power to decide upon the audit budget, combined with weak demands on auditor independence and professionalism, creates an institutional space to manage audit cost through recourse allocation. The results of the audit cost study also indicate that audit costs vary along stakeholder factors (population, tax base and tax rate), which implies that audit costs are influenced by monitoring and signalling incentives.

Secondly, less strict and more vague regulation can send mixed signals and create uncertainty. This is a typical situation when accounting practices are adopted through processes of imitation and learning in order to deal with uncertainty (cf. Haunschild and Miner, 1997; Carpenter and Feroz, 2001). The studies of accounting compliance within the solid waste management sector (less strict framework) indicate that both accounting compliance related to full cost accounting reporting and revenue recognition seem to be dependent on the interaction with the water and sewerage sector (stricter framework, more developed practice). The interaction probably supports diffusion of financial accounting practices through normative pressure, imitation and learning. This result should be of interest for accounting choice research in general, since it also highlights how financial accounting practice might diffuse, just like management accounting practices, through more subtle normative and mimetic pressure and learning processes.

The practical implications are that different levels of compliance not only materialise within each sector but also between sectors and within the same municipality. This poses a challenge for accounting regulation, sanctions and audit control. Since financial accounting practices vary along factors that are dependent upon local municipal decisions and the regulation of different sectors implies that practice evolves in a less controlled way. The analysis suggests that in order to secure accounting compliance and relevant accountability information from a stakeholder perspective, the regulatory framework needs to level out sector-specific regulation, the public–private sector divide and organisational freedom at the municipal level.

Chapter 5 – Contributions and future research

In this final chapter, the contributions are outlined and some policy implications are suggested. The chapter ends with suggestions for future research.

5.1 Contributions

This thesis consists of four papers, of which three investigate accounting compliance regarding full cost accounting reporting and revenue recognition within the Swedish solid waste management sector and water and sewerage sector. An important institutional background to the practical accounting problem relevant for these sectors is that they are regulated by the cost price principle. The fourth paper investigates the drivers of professional audit costs at the municipal administration level in Sweden, a setting institutionally characterised by local political control over the resource allocation for auditing.

Accounting compliance

This thesis contributes to the knowledge of municipal accounting on an empirical level by investigating accounting compliance regarding full cost accounting reporting and revenue recognition within cost price regulated municipal utilities (water, sewerage and solid waste management) in Sweden. Both the accounting topics and empirical settings are scarce in previous accounting compliance research.

Theoretically, this thesis provides further evidence that factors related to both economic agency incentives and institutional forces explain variation in accounting compliance, as exemplified by the analysis of these two particular municipal utility settings. The analyses show that factors that constitute the

common basis in previous research (municipal population, economic input, political competition, financial condition) have some explanatory power, but also that it is essential to recognise factors related to the specific sector and to local municipal governance forms and structures. Addressing accounting compliance within the Swedish municipal water and sewerage and solid waste management sectors made it also possible to identify specific factors (market competition, corporatisation, regionalisation and coordination) that have not been comprehensively analysed before.

Explaining accounting compliance in the water and sewerage and solid waste management sectors reveals that these sectors are influenced partly by different factors and partly by the same factors but in different ways. This conclusion probably extends to other segments such as education and elderly care, albeit their factors and relations are probably different. In this case, the question of which, why and in what way certain factors influence accounting compliance seems to be partly dependent upon the interrelation between accounting regulation, sector-specific institutional framework, reforms and governance decisions.

One of the resulting propositions is that the findings suggest there is a close relation between the coercive/normative influences (audit firm, legal form of corporation) and stronger institutional framework (strict legislation, sanctions, court cases, debate). Similarly, with weaker and less strict institutional frameworks, an institutional space is created where actors within the accounting system could be influenced by the wider context of monitoring and signalling incentives (population, market competition, economic input). Further, under these less strict conditions, financial accounting practice might also diffuse through more subtle normative and mimetic pressure and learning processes.

Continuing with reforms and governance decisions, the thesis provides some evidence that factors like market competition, legal form of corporation, regionalisation, cross-sectoral coordination and choice of audit firm all to some extent influence accounting compliance. These are all measures that can be linked to reforms at the central government and/or municipal level, e.g. new public management. By relating municipal reforms and governance forms and structures to accounting compliance, the conducted research also provides some evidence of the intended and unintended consequences of municipal reforms. The results of this thesis do indicate that measures such as competitive market, organisational form and engaged audit firm make the accounting practices themselves diversified and fragmented, as accounting

compliance varies along these measures. However, as a comment on the current debate, the effect is not always that the reform measures lead to less accounting compliance or less transparency, rather regulation also seems to have an important role in this respect as well.

All in all, this thesis contributes with further insights and suggestions on why municipal accounting compliance diverges in an uncontrolled way and why it is felt that there is a problem of securing accountability information under accrual accounting regimes at the municipal level. More practically, the results show that different levels of compliance not only materialise within each municipal subsector but also between subsectors and within the same consolidated municipality. This poses a challenge for accounting regulation, sanctions and audit control.

Municipal audit costs

Investigating municipal audit costs has its own empirical merit, since it is an unexplored issue in the Swedish context and because municipal audit cost research is very scarce in general, especially outside the Anglo-Saxon sphere.

Theoretically, the Swedish municipal setting is interesting because it is characterised by local political control over the resource allocation for auditing. Thus, the setting provides an opportunity to examine whether cross-sectional differences in audit costs might be explained by monitoring and signalling incentives related to the political environment. This perspective stands in contrast to the recent strong focus on audit risk, client complexity and audit market in explaining audit cost in municipal organisations.

The results of the study do indicate that audit costs vary dependent upon external stakeholder factors (population, tax base and tax rate), which supports the proposition that audit cost might be influenced by external monitoring demand and political signalling incentives. The implication is that audit might not only be a tool to secure compliance, but also a tool to manage stakeholder relations.

5.2 Policy implications

From a policy perspective, the results indicate that the changing institutional and organisational environment (municipal governance reforms) has not been matched by attention to, and regulation of, reporting structures that secure external vertical accountability reporting. This is the case at both the utility service level and the consolidated municipal level.

The general implication for future policy and regulations should therefore be to recognise the influence of different economic and institutional forces and develop accountability models that enable and preserve the benefits of governance reforms and structures without losing transparency and accountability. The findings of this thesis suggest that accounting regulation and audit control need to bridge the public–private sector divide, level out sector-specific regulations and possibly connect regulation and accountability to the consolidated municipal organisation. This could preserve organisational freedom while securing compliant accountability information to relevant stakeholders.

5.3 Future research

As for further research, investigating more sectors under the municipal umbrella could reveal additional complex forces influencing accounting compliance. If new public management began with the reformation of the technical municipal services in Sweden, it has lately continued with the important services of schooling and elderly care, where there have been several reforms over the past decade. The identification of the kind of economic, political and institutional factors influencing financial accounting practices in those sectors would be an important contribution.

Further, there is a need to explore the connection between financial accounting and its economic consequences in the public sector. For example, in Sweden it has recently been emphasised in the municipal accounting regulation that municipalities should apply component depreciation when relevant. This provides an opportunity to research how decisions on models and applications of component depreciation are dependent on the financial

and political situation of the municipalities, and whether these decisions are influenced by how they alter reimbursements internally and externally.

This thesis have emphasised how organisational freedom at the municipal level influence accounting practice. Since it is more and more common to externalise services, assets and transactions to municipal corporations and federations suggests that further research is warranted to investigate accounting quality and the role of the consolidated statements.

The efficiency of the municipal audit to secure accounting compliance could be analysed further. One way would be to directly analyse audit effort (or costs) against accounting compliance in municipalities. This research could also investigate how financial audit is weighed against management audit in order to understand how important accounting compliance is in relation to other aims of the audit.

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Appendix, containing the four papers

Articles in the appendix:

Paper 1

Haraldsson, M. and Tagesson, T. (2014), “Compromise and avoidance: The response to new legislation”, *Journal of Accounting & Organizational Change*, Vol. 10, No. 3, pp. 288–313.

Paper 2

Haraldsson, M. (*forthcoming*), “Transparency and accountability lost? Full cost accounting reporting in the Swedish municipal solid waste business”. Accepted for publication in *Journal of Accounting & Organizational Change*.

Paper 3

Haraldsson, M. “When revenues are not revenues: the influence of municipal governance on revenue recognition within Swedish municipal waste management”. Submitted to scientific journal.

Paper 4

Collin, S-O., Haraldsson, M., Tagesson, T. and Blank, V. (*forthcoming*) “Explaining municipal audit costs in Sweden: Reconsidering the political environment, the municipal organization and the audit market”. Accepted for publication in *Financial Accountability & Management*.