



# Compromise and avoidance: the response to new legislation

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## Abstract

**Purpose** – The aim of this paper is to describe, analyze and explain the level of compliance of accounting practices with legislation and generally accepted accounting principles (GAAP) within the Swedish water and sewerage sector.

**Design/methodology/approach** – The empirical data are based on a document study of the annual full cost accounting reports for the financial year 2010. We obtained complete data from 250 of Sweden's 290 municipalities. The data are analyzed by statistical methods. The explanations are based on an institutional theory.

**Findings** – Most of the organizations surveyed in this study had taken measures in line with the new regulations, but none of them had adapted fully to the new requirements. Thus, we suggest that the industry has responded to the new regulation by compromise and avoidance. The statistical analyses show that compliance with legislation and GAAP is associated with legal form, minority governance, fee, tax base, population growth and audit firm.

**Research limitations/implications** – This paper provides insight into the factors that explain compliance with accounting regulation. Future research would benefit from researching the decision process when organizations choose to comply or not to comply with specific accounting regulations in the public sector.

**Originality/value** – Few prior studies focus on the actual compliance of accounting practices at the municipal level in relation to accounting regulation and the factors that explain the level of compliance. Knowledge of the factors that explain compliance to accounting regulation will benefit from future policy decisions on regulation and auditing of public sector accounting.

**Keywords** Accounting, Accounting regulation, Public sector reform, Public sector accounting, Regulated industries

**Paper type** Research paper

## 1. Introduction

In a European context, many governments have been searching for the best way to reform their water and sewerage sector to control and support the efficient supply of water services (Argento and van Helden, 2009). These efforts have been part of the general transformation of the public sector with the purpose of enhancing efficiency and accountability (Pina *et al.*, 2009). The Swedish water and sewerage sector, however, has not been fundamentally reformed or privatized. It has long been a municipal monopoly, its operation financed by user charges regulated by the cost price principle (Malmer, 2003)[1]. Instead of reforming the sector, the government has recently, under the Public



Water Services Act (2006, p. 412), sought to strengthen the control of the public monopoly and the cost price principle through requirements for a disclosure of a full cost accounting[2] report.

Even though the water and sewerage sector has been regulated on a cost price basis since the 1970s (Malmer, 2003), there has been no specific regulation of reporting requirements to enable verification of the cost price principle. The implementation of the new law in 2007 stated, for the first time, that the results and the financial position of the operation should be reported separately and that they must be made according to generally accepted accounting principles (GAAP). With reference to older court cases (NJA, 1994, p. 10), the proposition stated that:

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

The legislature's main motive was to ensure transparency and verification, inherently to protect the users from monopoly pricing (Proposition 2005/06:78 – Public water services, p. 100). Financial accounting and reporting has thus been given an important role in regulating the municipal water and sewerage sector. The problem is that the follow-up of the cost price principle will be meaningless unless the accounts are prepared with good quality and in an equitable manner according to current accounting standards.

The main purpose of regulating accounting through legislation is to control the actual practice of accounting (cf. Bergevärn *et al.*, 1995). In general, it can also be stated that compliance with accounting regulation is important to safeguard the quality of financial information and the usefulness of the information to stakeholders (Verbruggen *et al.*, 2011) and also, as in the case of the Swedish water and sewerage sector, to protect users from monopoly pricing. However, it is not clear that legal regulation will lead to accounting practices in compliance with regulations; rather, it is an important empirical question (cf. Zimmerman, 1977). Empirical evidence from Sweden also indicates that law enforcement does not necessarily lead to accounting practices in accordance with the law. For example, the introduction of the Municipal Accounting Act (KRL, 1997, p. 617) has had only a weak influence on accounting practices; compliance with accounting standards has been, in general, poor among municipalities (Falkman and Tagesson, 2008) and among municipal water and sewerage operations (Tagesson, 2007). Poor or varying degrees of compliance with accounting regulation at the municipal level have also been reported in other European countries (Christiaens, 1999; Jones and Pendlebury, 2004; Da Costa Carvalho *et al.*, 2007).

The issue of compliance with accounting regulation is a topic of growing importance for public sector financial accounting research. In the past 20 years, more and more organisation for economic co-operation and development (OECD) countries have introduced accrual accounting at all tiers of government (Pina *et al.*, 2009), and one of the main themes for discussion and research at the turn of the twenty-first century has been whether the transition from accounting on a cash basis to accrual accounting is appropriate for the public sector (Connolly and Hyndman, 2006; Broadbent and Guthrie, 2008; Falkman and Tagesson, 2008). Our argument is that the compliance issue becomes more important as more and more countries adopt accrual frameworks for their public sector accounting, using the argument of improving efficiency, accountability and

transparency. Further, with accrual accounting, there will always be a wider scope for arbitrary judgement (Jones and Pendlebury, 2004), creating a need for more extensive regulation to support and control practice. Compliance with accounting regulations becomes of central interest to many interested parties (the government, taxpayers, regulatory bodies and others).

The early public sector accounting compliance studies (Jones and Pendlebury, 1982, 1991; Ingram, 1984; Allen and Sanders, 1994) focussed on disclosure of reports and information. However, these research projects are dated before the wave of accrual accounting implementation in the public sector, a time when there generally was no clear framework or GAAP for the public sector accounting (Christiaens, 1999). Recently, we can observe a second wave of research trying to describe and analyze the degree of compliance with accrual accounting regulation in the public sector (Christiaens, 1999; Jones and Pendlebury, 2004; Da Costa Carvalho *et al.*, 2007; Falkman and Tagesson, 2008; Pina *et al.*, 2009). However, the number of studies is still quite small (Christiaens, 1999; Da Costa Carvalho *et al.*, 2007).

Our aim with this paper is to describe, analyze 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 requirement for water and sewerage operations, through sector-specific legislation, to practice full cost accounting in accordance with GAAP, provides an opportunity to study how accountable organizations actually respond to legislation. Our study adds to the quite scarce research on financial reporting compliance in the public sector, and we hope our results may support standard setters in their work to support qualitative accounting.

The rest of this paper is structured as follows: Section 2 briefly describes the context and regulation of the Swedish water and sewerage sector. In Section 3, the theoretical framework and hypotheses are developed. Section 4 describes the data collection and the variables used for analysis. Section 5 presents the analysis and empirical results, and Section 6 provides concluding remarks and a discussion.

## 2. The Swedish water and sewerage sector

Distribution of water and wastewater treatment in Sweden is provided by municipalities. The turnover within the sector is approximately €180 million annually, and about 6,000 people work in the Swedish water and sewerage administrations. The business on a national basis consists of approximately 2,000 water works; 2,000 sewage treatment plants; about 67,000 km of water pipelines; and 92,000 km of sewer lines.

The business is characterized 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. Its monopoly status is also secured in Sweden by legislation.

Responsibility and ownership of Swedish water and sewerage operations rests, according to Swedish law, with Sweden's 290 municipalities. It is a so-called municipal core activity and a statutory municipal monopoly. Swedish municipalities have large powers of self-determination and are relatively autonomous with respect to the organization of local activities. This freedom of choice also includes the choice between the legal forms of *municipal administration* and *municipal corporation* (Argento *et al.*, 2010). Thus, it is up to the municipal council to decide upon the legal form. Municipalities can also offer the services by a cooperative arrangement.

Unlike other municipal activities, water and sewerage operations are mainly financed through charges paid by users of the services. Municipalities have the legal ability to fund their activities through taxation, but the vast majority of Sweden's municipalities aim and manage to finance the operation entirely by charges. For the financing of investments, the water and sewerage organization normally borrows money directly from, or with the guarantee of, the municipality. The costs may then be covered by fees collected from the subscribers. The tariff is usually a combination of a fixed fee per household and a volume-dependent fee based on water consumption (per litre). The balance between fixed and volume-dependent fees in the tariff is a matter for each municipal council to decide. However, the total charges should not exceed total costs (including capital costs).

Of importance to the operation is that it is regulated by sector-specific legislation in addition to more general laws such as the Municipal Act and various environmental and food laws. [Malmer \(2003\)](#) observes that the first Public Waterworks and Sewerage Act came into effect in 1955. The cost price principle was one of the leading principles already in this first Act. In 1970, a new Act was introduced, and a special administrative court, the Swedish Water Supply and Sewage 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.

The latest legislation, implemented in Swedish municipal water and sewerage operations in 2007 by the [Public Water Services Act \(2006, p. 412\)](#), states that the results and the financial position of operations should be reported separately for the water and sewerage business and that it must be done according to GAAP. Thus, every update of the legislation has added new pieces to secure adherence to the cost price principle within the sector.

The Public Water Services Act states that property owners within the water and sewerage plant, i.e. subscribers, are required to pay charges for public water services (§§ 24-25). Consequently, the water and sewerage industry is a monopoly business with a legal right to collect fees from its users. The legislation also regulates the revenue collection, its size and construction. The operator may charge facility fees (for the initial connection to the common plant) and consumption fees (current charges for the use of the plant) (§ 29).

The definition of the cost price principle means that the charges must not exceed what is needed to cover necessary costs to organize and operate the water and sewerage facility (§ 30). "Necessary costs" should be interpreted as only valid operations-related expenses within the bounds of the legislative assignment. This is stronger wording than the general cost price principle within the public sector in Sweden, which states that charges should not exceed the costs to operate the service. In practice, the cost price principle means that the business cannot make a profit.

As mentioned, a new provision in the legislation, which is the basis of the present study, is the requirement to separately disclose the financial results and position of the water and sewerage operation in accordance with GAAP. Thus, both the Act and general accounting legislation and accounting standards must be considered.

The new Public Water Services Act regulates accounting as follows:

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

- that the activities are recorded and reported in accordance with GAAPs 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
- that the statement, when it is approved, is available to the property owners.

This regulation of the financial statements may seem limited, but means that a separate income statement and balance sheet must be prepared and made available to property owners after approval. The additional information must also make clear how common costs are allocated. Because the water and sewerage operations are usually part of a larger municipal organization and thus use common resources, it is considered reasonable to clarify how these costs have been allocated ([Proposition 2005/06:78 – Public water services](#), p. 100).

Importantly, the Act also provides that the principal must ensure that the accounting is done according to GAAP. The report and the proposition on the law found no reason to specifically regulate the meaning of GAAPs, as this is already regulated for both private corporations and municipalities:

Given the general regulation that already exists and which is now quite similar for both municipalities and private businesses, there should be no great need for special regulations for the law on how the books and accounts shall be made for the water and sewerage operations. If such is made, as current rules require, according to generally accepted accounting principles, this should, perhaps, be quite sufficient ([SOU, 2004](#), p. 64, 202).

According to the Public Water Services Act, revenues that exceed cost must be refunded to subscribers. Because both private and public sector accounting in Sweden is done on an accrual basis, revenues attributable to overcharging are considered a legal obligation and should be treated as a liability in the balance sheet ([RKR 18](#)).

Notably, the preparatory work for the law does not address the question whether there is a need for auditing and oversight with respect to full cost accounting. The legislature may have concluded that the general audit carried out within the municipal administrations and corporations would be sufficient, but the question is not addressed in the legislative work.

The Public Water Services Act requires that the accounting is done according to GAAP. In the Swedish context, GAAP means that the preparer must apply legislation and accounting standards issued by standard-setting bodies. If no specific accounting regulation exists, the preparer should prepare their financial reports in line with “the code of good accounting practices”, i.e. accounting practices commonly occurring among well-respected organizations ([Jönsson, 1985](#); [Collin et al., 2009](#)). The requirement to follow GAAP is applicable regarding valuation, classification and disclosures. GAAP is an important concept in this study, as at the very core of the research question is the empirical question: Do water and sewerage operations actually report in accordance with relevant laws and standards (GAAP)?

The public municipal sector and the private sector in Sweden are regulated by different accounting laws; therefore, the legal form of the water and sewerage operation is of importance. If the operation is conducted in the form of a municipal administration, which the majority of operations are, the Municipal Accounting Act ([KRL, 1997](#), p. 617) regulates the accounting. That the municipal accounts are governed by specific

accounting legislation is actually a relatively recent phenomenon. It was not until 1998 that a separate accounting law came into effect. The Municipal Accounting Act is the so-called framework legislation, which means that the accounts are regulated by principles. What the law states is that, in the sector, GAAP should be followed by those accountable. The Council for Municipal Accounting is, therefore, commissioned to monitor and develop GAAP (Tagesson and Eriksson, 2011). The Council, since its founding in 1998, has issued accounting standards to complement the legislation, so these standards play an important role in the interpretation of GAAP for the municipal sector. Municipal corporations must follow private sector legislation and regulation regarding accounting. Private corporations are regulated by the *Bookkeeping Act* (1999, p. 1078) and the *Annual Accounts Act* (1995, p. 1554). The Accounting Standards Board, the standard-setting body, issues accounting standards to be applied by private sector corporations.

In developing the standards for municipal accounting, comparisons have been made with private sector accounting standards to not create differences that cannot be justified by the varying requirements of the two sectors. Falkman and Tagesson (2008) explain that the differences between the laws regarding accounting in the private and public sectors are relatively small, but with one crucial difference. In contrast to the private sector, violation of accounting legislation is not related to the penal code within the municipal sector.

### 3. Theory

This study mainly relies on institutional theory to derive hypotheses. Institutional theory is one of two main theories used to explain accounting choice (Collin *et al.*, 2009) and has been frequently used as the theoretical base to understand and explain accounting compliance and accounting choice in public sector organizations (Neu and Simmons, 1996; Carpenter and Feroz, 2001; Tagesson, 2007; Da Costa Carvalho *et al.*, 2007; Falkman and Tagesson, 2008; Pina *et al.*, 2009; Collin *et al.*, 2009). In contrast, the other main theory, positive accounting theory, according to Carpenter and Feroz (2001), was frequently used in what could be described as the “first wave” (Verbruggen *et al.*, 2011) of public sector accounting choice studies (Zimmerman, 1977; Ingram, 1984; Jegers and Houtman, 1993). In an influential article about financial reporting among governmental entities, Carpenter and Feroz (2001) concluded that prior public sector accounting research ignored how institutional and organizational pressures constrain accounting choice and that institutional theory provides a useful theoretical lens through which to view accounting choice in the public sector. This is because the explanatory power of the models based on economics has been poor or mixed (Mezias, 1990) and that public sector organizations are highly influenced by political, regulatory and legal pressures to conform to or resist accounting practices (Carpenter and Feroz, 2001) which are captured by institutional theory. In addition, Jones and Pendlebury (2004) suggest, after researching UK local government compliance with accounting requirements in the 1970s, 1980s and 1990s, that institutional theory may offer a fuller explanation.

Institutional theory claims that organizations adopt structures and practices that are accepted and considered legitimate (Meyer and Rowan, 1977) within the organizational field as a response to different pressures and impulses from their institutional environment (Oliver, 1997). This suggests standardization with certain norms (Meyer

and Rowan, 1977; DiMaggio and Powell, 1983). Institutionalization is defined by Covaleski and Dirsmith (1988, p. 562) as “the processes by which societal expectations of appropriate organizational form and behaviour come to take on rule-like status in thought and action”. When it comes to accounting choice in the public sector, these might be influenced by the institutional environment (Carpenter and Feroz, 2001; Collin *et al.*, 2009). Carpenter and Feroz (2001) argue that institutional theory strongly suggests that there will be a tendency for all public sector organizations to eventually adapt practices to GAAP, especially because the institutional pressures are strong in the public sector and accounting bureaucrats may not independently have the political power to decide on accounting practices.

Studies that apply institutional theory to explain accounting choices in the public sector (Carpenter and Feroz, 2001; Falkman and Tagesson, 2008; Pina *et al.*, 2009; Collin *et al.*, 2009) use DiMaggio and Powell’s (1983) three different mechanisms of institutionalization:

- (1) *Coercive* – Pressure from an external organization.
- (2) *Mimetic* – Imitation of others.
- (3) *Normative* – Ideas and preferences within a professional group.

The *coercive* “logic” builds on the idea that one organization is dependent on another organization and, therefore, conforms to pressures from that organization. One of the major influences on compliance with accounting regulations could be the presence (or absence) of institutions that can force or strongly influence public sector reporting entities to comply. The new reporting requirements for the water and sewerage sector are introduced by the government, one of the strongest mechanisms for institutional pressure. *Mimetic* isomorphism refers to the tendency of organizations to follow trends or imitate other organizations which are perceived as successful and legitimate. Mimetic behaviour is part of the process of dealing with uncertainty. The *normative* mechanism contains the pressure of professional groups. Formal education and professional networks may influence the adoption of insights, models and normative rules. The profession in this case would be the accountants working in the municipal administrations or the municipal corporations (Collin *et al.*, 2009). In addition, auditors and auditing firms are important actors in the process of institutionalizing accounting standards (Collin *et al.*, 2009).

Because many researchers (Christiaens, 1999; Jones and Pendlebury, 2004; Da Costa Carvalho *et al.*, 2007; Tagesson, 2007; Falkman and Tagesson, 2008) have observed poor or varying degrees of compliance with accounting regulation at the municipal level, non-compliance behaviour needs to be considered. From a theoretical point of view, non-compliance with institutional norms and regulation (e.g. accounting law and standards) can be expected, as organizations do not always adapt to the rules, myths and expectations of their institutional setting (Oliver, 1991). The argument is that this resistance might occur when internal political interests strongly conflict with institutional influences. According to Oliver (1991), organizations 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. How organizations actually respond depends on who is exerting the institutional pressure, on

how dependent the focal organization is on the stakeholder that exercises the institutional pressure and on the built-in control mechanism, among other things.

Based on institutional theory, the following hypotheses are proposed:

### 3.1 Size

Size of organization is frequently used to explain organizations' accounting choices (Falkman and Tagesson, 2008; Collin *et al.*, 2009; Reginato, 2010). According to Falkman and Tagesson (2008), large organizations attract more attention and are much more closely scrutinized by the media, which increases the perceived normative and political pressure on these organizations. Furthermore, size also decreases the opportunity to exercise social control and thus creates a need for better quality and monitoring capacity of the accounting system (Cassel, 2000). This may be a particularly relevant point for the water and sewerage operation, which is usually a unit within the larger municipal organization.

From a normative perspective, size implies more resources to employ a greater number of professional economists with a higher degree of skill, which strengthens the professional group (Falkman and Tagesson, 2008). Law and norms aimed at a specific occupational group give that group a base to act from (Collin *et al.*, 2009). In institutional theory, size is also an estimate of management capacity (Johansson and Siverbo, 2009), that is, the organization has the skills to report in accordance with current regulations. Collin *et al.* (2009) point out that smaller organizations tend to follow larger ones (mimetic behaviour), which might over time reduce the effect of the size factor. Hence, we believe that the influence of size should be interpreted with caution.

This leads us to the hypothesis that:

H1. Water and sewerage organizations' compliance with the law and regulations for full cost accounting increases with size.

### 3.2 Legal form

In Sweden, the regulation of corporate accounting is associated with a penal code for misstatements – this measure is not similarly applicable to municipalities. The lack of a connection between the Municipal Accounting Act and the penal code may result in lesser compliance with accounting legislation and standards within the legal form of municipal administration (Falkman and Tagesson, 2008). Thus, formally, the coercive pressure is stronger for municipal corporations than for municipal administrations. However, Tagesson (2007) points out that it is very unusual (i.e. low risk) that board members in municipal corporations are charged for violating accounting legislation.

In addition, monitoring and control are different, depending on the legal form, especially regarding auditing. Previous studies have shown that auditors' actions have had an impact on accounting practices (Tagesson, 2007). Municipalities are audited by elected political auditors with the help of experts with no direct responsibility, while municipal corporations are audited by professional external auditors with personal responsibility. Professional auditors within the corporate sector also have the means to make remarks and force their clients to comply with accounting laws and regulations. Political auditors, with the help of their experts, can also make remarks and exert normative pressure; however, tools to force the municipalities to change accounting practices are essentially non-existent.



From an institutional perspective, institutional pressures are predicted overall to be stronger for municipal corporations than for municipal administrations. This means that the legal form should affect the enforcement of law and standards for disclosure in water and sewerage operations in Sweden. This leads us to the hypothesis that:

- H2.* Water and sewerage organizations, in the form of municipal corporations, comply with law and regulations for full cost accounting to a greater extent than municipal administrations.

### *3.3 Audit firm*

Audit firm has been identified in previous studies in both the private and public sectors as a normative factor affecting an organization's application of accounting principles (Falkman and Tagesson, 2008; Collin *et al.*, 2009). Audit firms and their employees have a normative effect (DiMaggio and Powell, 1983) on the reporting entity through the conduct of an audit. The audit process enhances the effects of existing laws and regulations. Auditors and auditing firms are important actors in the process of institutionalizing accounting standards (Jönsson, 1985). What impact the audit has depends, among other things, on the institutional framework of the audit (this framework is one component of the factor we termed "legal form" as defined in the previous sub-section).

In addition to the institutional conditions for auditing, the way firms and their employees act might influence compliance with accounting standards. Audit firms differ in culture, client base, history, experience, internal structures and other respects and create their own routines and tools that influence the auditors in their work (Collin *et al.*, 2009). The focus and quality of the audit might therefore differ among firms.

Within the municipal sector in Sweden, there are a few dominant firms (PwC, KPMG, Ernst & Young and Deloitte), and one of those firms, PwC, has over 50 per cent of the market. No municipality uses a small auditing firm, but a few municipalities use their own employees as expert advisors to the elected political auditors. With the municipal corporations, it is the same four corporations that dominate. The contribution of other firms is marginal.

The legislative demand for full cost accounting within the water and sewerage sector is relatively new and is consequently new as an audit object. The water and sewerage operation also represents a smaller area within the overall municipal audit. Further, no special demand for audit actions are expressed in the Public Water Services Act. We may therefore expect that there are differences in how firms perceive their audit assignments and how audit firms have built up expertise and procedures for auditing the accounts for water and sewerage operations. Following Collin *et al.* (2009), we cannot predict which audit firm will influence compliance with law and regulation for full cost accounting to a greater extent than the others. We therefore hypothesize that:

- H3.* Audit firm will, to a varying extent, influence compliance with law and regulations for full cost accounting among water and sewerage organizations.

### *3.4 Political governance/political majority*

Political parties or coalitions are based on different ideologies and values; hence, the parties focus on different issues (Johansson and Siverbo, 2009). Carpenter and Feroz (2001) believe that accounting choices can be affected by the political power situation.

Municipalities are governed by politicians who seek to be re-elected (Laswad *et al.*, 2005) on the basis of their policies and by being perceived as legitimate. Compliance with standards and regulations, for example, might be affected if the ruling majority in the municipality is the same as the government that introduced the legislation (Falkman and Tagesson, 2008). You do not want to deviate from the party line (Carpenter and Feroz, 2001). Thus, the political majority that controls the municipality affects not only policy but may also influence implemented accounting practices (Falkman and Tagesson, 2008; Johansson and Siverbo, 2009; Tagesson *et al.*, 2013). We may therefore assume that differences in ruling majorities are reflected through the level of compliance with accounting standards and regulation. However, as for full cost accounting for water and sewerage operations, it is difficult to determine the direction. This leads us to the hypothesis that:

*H4.* The governing coalition will, to a varying extent, influence compliance with law and regulations for full cost accounting.

### 3.5 Political competition

Political competition means that there are multiple parties on the council. When there is strong political competition, power relations can be unclear, leading to conflict and uncertainty. Baber (1983) argues that in a competitive situation, the requirements of monitoring increase, and the ruling coalition may want to signal to voters and stakeholders that they are responsible and creditable (Copley and Doucet, 1993). Thus, the incentive to follow laws and regulation increases (Baber, 1983). This leads to the following hypothesis:

*H5a:* Water and sewerage organizations' compliance with law and regulations for full cost accounting increases with political competition.

On the other hand Johansson and Siverbo (2009) argue that it is also likely that there is a greater interest in information asymmetry in a politically competitive situation. Moreover, political competition may generally create an uncertain situation which complicates implementation of new accounting procedures such as reporting on a full cost basis for water and sewer operations. This leads us to the hypothesis that:

*H5b.* Water and sewerage organizations' compliance with law and regulations for full cost accounting decreases with political competition.

### 3.6 Financial strength

As with size, financial strength is a very common factor in accounting research (Street and Gray, 2002; Tagesson *et al.*, 2013). Financial strength may depend on effective management, which means that the competence exists within the organization (Belkaoui and Karpic, 1989), in this case, to establish full cost accounting according to law and standards. Obviously, organizations with strong finances also have the necessary financial means to use the necessary resources to comply with prevailing accounting laws and regulations. In an organization with fewer financial resources, management will probably focus on activities that have a more direct effect on the operation. This leads us to the hypothesis that:

*H6a.* Water and sewerage organizations' compliance with law and regulations for full cost accounting increases with financial strength.

Financial weakness, on the other hand, might lead to a rational need for closer and more detailed monitoring of operations, which, in turn, could mean a more detailed disclosure of full cost accounting. Financial distress can also attract political attention and generate harsher scrutiny, which puts institutional pressure on the organization (DiMaggio and Powell, 1983), which, in turn, creates a need to show that it is in control and that the accounting practices are thus developed for legitimate reasons. The need to use the full cost accounting report to justify the charges may also increase in a financially weak position. This leads us to the hypothesis that:

*H6b.* Water and sewerage organizations' compliance with law and regulations for full cost accounting decreases with financial strength.

### *3.7 Fee level*

Fee levels for water and sewerage services differ among municipalities. Sweden is a geographically large country, and the difference in fee levels is mainly due to different topological and demographic conditions (Malmer, 2003). According to Jensen and Payne (2005), citizens' interest in municipal decisions can be explained by their level of economic input. In the case of water and sewerage, which are financed by fees, the higher the fees, the higher the demand for information about their use. High levels of fees create a need to demonstrate that the fees are reasonable, and this may be achieved by establishing full cost accounting for water and sewerage operations according to the law and standards.

High fee levels can also lead to questions from subscribers who want to know that the fees are justified by the cost price principle. Similarly as with a weak financial position, high fees generate harsher scrutiny by the media, as they put institutional pressure on the organization (DiMaggio and Powell, 1983). Furthermore, the risk that the contribution rate is reported to the Swedish Water Supply and Sewage Tribunal increases. This leads us to the hypothesis that:

*H7.* Water and sewer organizations' compliance with law and regulations for full cost accounting increases with fee level.

### *3.8 Tax base*

Residents' tax capacity, that is, income level, has been shown to affect how active they are as citizens (Jensen and Payne, 2005). Well-educated and otherwise resourceful inhabitants can be expected to be more active and place greater demands on the municipality. Higher income per citizen equals more taxes paid per citizen, which, in turn, leads to higher interest in municipal decisions and greater demand for better information (Tagesson *et al.*, 2013). This leads us to the hypothesis that:

*H8.* Water and sewer organizations' compliance with law and regulation for full cost accounting increases with tax base.

### *3.9 Population growth*

Strong population growth means that new houses, apartments and industry buildings are built and the customer base increases for water and sewerage operations (Fjertorp, 2010). Ingram (1984) argues that population growth affects accounting choices because the demand for information becomes stronger with the larger population/greater number of customers. The increased size of the operation also creates a need for better

monitoring and reporting systems (Cassel, 2000), and also a growing state, with respect to a growing number of new customers, investments, service deliveries and transactions, creates *per se* a need for better accounting to be in control. The population growth factor is parallel with the size factor, but captures growing municipalities. This leads us to the hypothesis that:

H9. Water and sewerage organizations' compliance with laws and regulations for full cost accounting increases with population growth.

## 4. Method

### 4.1 Data collection

The empirical data in this study are based on a document study of the annual full cost accounting report for the financial year 2010. This period is four years after the requirement for full cost accounting reporting for the water and sewerage sector was legislated by the [Public Water Services Act \(2006\)](#) of 2006. Because the Act did not regulate how the full cost accounting report should be made available, we started the data collection process by scanning the websites of the municipalities and corporations. If we did not find the annual full cost accounting report on the website, we turned to the annual reports of those entities. The last step was to send an email to the municipality or corporation. Two reminders were sent to those for which we could not retrieve reports.

### 4.2 Dependent variable

The data for the dependent variable – compliance with laws and regulations for full cost accounting by water and sewerage organizations in Sweden – were hand-collected from the annual full cost accounting reports. Following previous research on financial reporting compliance (Christiaens, 1999; Pina and Torres, 2003; Da Costa Carvalho *et al.*, 2007), the level of compliance was measured by a checklist (see [Appendix](#)), resulting in a compliance index. The checklist is divided into two different areas: legal issues and GAAP issues.

The legal issue area is derived from the Public Water Services Act, the accounting laws regulating municipal or corporation accounting and specific standards. The legal issue area measures specific accounting issues which the preparer must follow. The GAAP issues area is derived from accounting standards issued by the standard-setting bodies and from publications from the Council for Municipal Accounting (*Redovisning av affärsverksamhet - mot bakgrund av självkostnadsprincipen*, 2006) and the Swedish Water and Wastewater Association (*Ekonomisk redovisning för VA-branchen*). The GAAP issues area measures content and information requirements that are mandatory but not explicit in the law.

Some accounting issues and disclosures within the two areas might be of more importance than others, and it is difficult to weight them. Thus, we have used an unweighted scoring approach (Gray *et al.*, 1995; Tagesson *et al.*, 2013). Initially, each topic in the checklist was recorded as a dummy variable, where “1” indicates that the accounting requirement is fulfilled, and “0” indicates non-compliance. To measure the compliance by the preparers in the study, we recalculated the dummy variables into percentage rates for each area and the total number of issues (Tagesson *et al.*, 2009) into three indexes: total index, legal issues index and GAAP issues index.

#### 4.3 Independent variables

- *Size* was measured as the number of inhabitants (Falkman and Tagesson, 2008). Using population as a measure for size is consistent with previous municipal research, and using inhabitants as a proxy for size avoids the accounting errors contained in financial accounting measures such as revenues or assets (Rubin, 1988; Falkman and Tagesson, 2008).
- *Legal form* was recorded during the data collection.
- *Audit firm* was retrieved from the audit firms. The four audit firms – PwC, Ernst & Young, KPMG and Deloitte – were treated separately. Municipalities with their own audit office were treated as one group, and PwC was used as reference variable.
- *Political governance/political majority*. Political majority determines which of three groups a municipality will be classified into: Conservatives and Liberals, Social Democrats and the left-wing party or municipalities with an indistinct majority.
- *Political competition* was measured in two ways. The first variable was whether the municipality was governed by the *majority* or the *minority* (= more competition). The other variable measured was whether there was a *change* (= more competition) in the last election regarding the ruling party/parties. The data were retrieved from the Swedish Association of Local Authorities and Regions (*Sveriges Kommuner och Landsting*).
- *Solidity* was used a measure of financial strength (equity/total assets).
- *Fee* level was retrieved from the Swedish Water and Wastewater Association (*Svenskt Vatten*)
- *Tax base* was measured as the sum of all inhabitants' income and benefits, divided by the number of inhabitants. The data were retrieved from Statistics Sweden. There were other alternatives, but tax base was preferred as an independent variable, as the theory contains elements of the capacity of the inhabitants, thus referring more to their income (Tagesson *et al.*, 2013).
- *Population growth* was measured as the percentage growth between 2006 and 2010, i.e. the years the Public Water Services Act has been active. The data were retrieved from Statistics Sweden.

#### 4.4 Non-respondent analyses

We succeeded in obtaining complete data from 250 of Sweden's 290 municipalities, a data loss of 40 municipalities. However, for the variables *size*, *fee*, *tax base* and *solidity*, we have data for the full sample. Those variables were used in the non-respondent analyses (Table I).

With reference to *size*, *solidity*, *fee* and *tax base*, the non-respondent analyses show that the sample with included cases could be considered as a random one.

### 5. Analysis

The descriptive statistics of the variables are presented in Table II. For the continuous variables, the table shows mean values and standard deviations, and for

Variables	Mean	SD	N	Compromise and avoidance
<i>Number of inhabitants</i>				
Missing cases	39,405	81,8532	40	
Cases included	31,358	61,9049	250	
<i>t</i> -test: no significance ( $p = 0.468$ )				
<i>Solidity</i>				
Missing cases	3.130	19.7166	40	
Cases included	6.771	25.3325	250	
<i>t</i> -test: no significance ( $p = 0.386$ )				
<i>Fee</i>				
Missing cases	5622.013	1071.4646	40	
Cases included	5770.293	1340.7585	250	
<i>t</i> -test: no significance ( $p = 0.506$ )				
<i>Tax-base</i>				
Missing cases	160789.225	13622.1501	40	
Cases included	163248.544	20388.2164	250	
<i>t</i> -test: no significance ( $p = 0.331$ )				

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**Table I.**

Non-respondent analyses

the categorical variables, the table shows frequencies in terms of the number and percentage.

As shown in Table II, the respondents deviate more from GAAP than from the explicit legislation; on average, they deviate by > 45 per cent from the explicit legal requirements. About 20 per cent of the water and sewerage businesses are run in the legal form of a corporation. PwC is the dominant player among the audit firms, with over 55 per cent of the audit assignments.

Table III shows the correlation matrix.

As shown in Table III, all independent variables, except *fee*, show correlation with the dependent variable – total percentage of legal and GAAP issues. The same condition occurs when looking at only *GAAP issues* as the dependent variable. However, if only looking at *legal issues* as the dependent variable, only four of the variables show a significant correlation. Several of the independent variables correlate with each other; however, as shown in Table IV, the collinearity statistics show that all VIF values are far below the critical value of 2.5 (Djurfeldt *et al.*, 2007).

For compliance with legislation, as well as GAAP, three regression analyses were performed:

- (1) one with the total compliance index as the dependent variable;
- (2) one with only the compliance index based on explicit legal issues; and
- (3) one with the dependent variable only based on compliance with GAAP.

The model used in the analysis was based on the following:

$$CI_{jt} = \alpha + b_1SIZE_{jt} + b_2LF_{jt} + b_3Min_{jt} + b_4SP_{jt} + b_5SoI_{jt} + b_6Fee_{jt} + b_7TB_{jt} + b_8PG_{jt} + b_9CL_{jt} + b_{10}IPM_{jt} + b_{11}EY_{jt} + b_{12}K_{jt} + b_{13}D_{jt} + b_{14}OO_{jt} + \varepsilon_{jt}$$

JAOC  
10,3

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<i>Dependent variables</i>		
Total percentage	Mean/SD	43.450/24.3174
Percentage legal issues	Mean/SD	54.550/27.8257
Percentage GAAP issues	Mean/SD	37.900/28.1883
<i>Independent variables</i>		
Inhabitants	Mean/SD	31,358/61,9049
Solidity	Mean/SD	6.771/25.3325
Population growth	Mean/SD	0.882/4.5338
Fee	Mean/SD	5770.293/1340.7585
Tax base	Mean/SD	1603248.544/20388.2164
Tax rate	Mean/SD	21.488/1.1912
<i>Legal form</i>		
Corporation (0)		52 (20.8%)
Direct management (1)		198 (79.2%)
<i>Political competition</i>		
Majority (0)		219 (87.6%)
Minority (1)		31 (12.4%)
No shift of power (0)		178 (70%)
Shift of power (1)		72 (30%)
<i>Political governance</i>		
Social democrats/Left-wing		86 (34.4%)
Conservatives/Liberals		125 (50%)
Indistinct majority		39 (15.6%)
<i>Audit firm</i>		
PwC		139 (55.6%)
Ernst & Young		46 (18.4%)
KPMG		48 (19.2%)
Deloitte		13 (5.2%)
Own office		4 (1.6%)

**Table II.**  
Descriptive statistics

where:

- CI = Compliance Index;
- SIZE = Number of inhabitants;
- LF = Legal form;
- Min = 1 if minority, 0 if majority;
- SP = 1 if shift of power at the latest election, 0 otherwise;
- Sol = Solidity;
- Fee = Fee per subscriber;
- TB = Tax base;
- PG = Population growth;
- CL = 1 if conservative/liberal governance, 0 otherwise;
- IPM = 1 if indefinite political governance;
- EY = 1 if Ernst & Young, 0 otherwise;
- K = 1 if KPMG, 0 otherwise;
- D = 1 if Deloitte, 0 otherwise; and
- OO = Own Office.

Variable	I	II	III	1	2	3	4	5	6	7	8
Total percentage	1										
Percentage legal issues	0.719**	1									
Percentage GAAP issues	0.939**	0.436**	1								
Inhabitants	0.162*	0.044	0.188**	1							
Legal form	-0.133*	0.102	-0.223**	-0.198**	1						
Minority	-0.182*	-0.094	-0.189**	-0.019	0.043	1					
Shift of power	-0.123***	-0.104***	-0.107***	-0.098	0.043	0.056	1				
Solidity	0.174**	0.188**	0.132*	0.259**	0.164**	0.101	-0.144*	1			
Fee	-0.077	0.058	-0.071	-0.375**	0.009	0.068	0.108***	-0.376**	1		
Tax base	0.257**	0.178**	0.245**	0.260**	-0.102	-0.100	-0.1192**	0.253**	-0.300**	1	
Population growth	0.251**	0.219**	0.217**	0.384**	-0.073	0.069	-0.224**	0.487**	-0.468**	0.537**	1

**Notes:** The dummy variables for political governance and audit firm are included; \* correlation is significant at the 0.05 level; \*\* correlation is significant at the 0.01 level; \*\*\* correlation is moderately significant at the 0.10 level

Compromise and avoidance

**Table III.**  
Correlation matrix



Table IV.  
Regression results

Variables	Total (N = 250)		Legal issues (N = 250)		GAAP issues (N = 250)	
	B	SE(b)	B	SE(b)	B	SE(b)
Constant	11.798	17.182	21.542	20.130	0.036	0.031
Inhabitants	0.016	0.027	-0.023	0.032	0.036	0.031
<b>Legal form</b>	<b>-0.7.708*</b>	3.850	7.022	4.511	<b>-15.073**</b>	4.402
<b>Minority</b>	<b>-13.979**</b>	4.573	<b>-10.679*</b>	5.357	<b>-15.630**</b>	5.228
Shift of power	-0.1.104	3.459	-1.088	4.052	-1.112	3.955
Solidity	0.091	0.070	0.096	0.082	0.088	0.080
<b>Fee</b>	<b>0.002***</b>	0.001	0.002	0.002	0.002	0.002
<b>Tax base</b>	<b>0.152***</b>	0.088	0.094	0.104	<b>0.182***</b>	0.101
<b>Population growth</b>	<b>0.816***</b>	0.493	0.874	0.577	0.788	0.563
<i>Political governance</i>						
Conservatives/Liberals	3.376	3.359	1.943	4.214	4.093	4.112
Indistinct majority	-2.833	4.725	-4.918	5.536	-1.791	5.403
<i>Audit firm</i>						
Ernst & Young	-3.784	4.186	<b>9.765*</b>	4.904	<b>-10.559*</b>	4.786
KPMG	-2.415	3.901	-0.047	4.571	-3.599	4.461
Deloitte	-3.054	6.815	2.004	7.984	-5.583	7.791
Own office	13.212	12.198	18.043	14.291	10.793	13.947
R <sup>2</sup> /Adj. R <sup>2</sup> /F-value/Sig.		0.160/0.109/3.189/000		0.119/0.066/2.266/0.006		0.182/0.134/3.743/0.000

Notes: \*Correlation is significant at the 0.05 level; \*\* correlation is significant at the 0.01 level; \*\*\* correlation is moderately significant at the 0.10 level

As shown in Table IV, the variables *legal form* and *minority* are significant and negatively correlated in the model with the total compliance index (including both legal and GAAP issues) as the dependent variable. The variables *fee*, *tax base* and *population growth* are all moderately significant and positively correlated.

In the model where the dependent variable compliance index only includes legal issues, the variable *minority* is still significant and negatively correlated. The model also shows that engaged *audit firm* influences the compliance with legislation. The dummy variable *Ernst & Young* is significantly separated from the reference group that represents *PwC*. The sign is positive, meaning that if Ernst & Young is engaged as professional auditors, the water and sewerage business will comply with the legal issues to a greater extent than if PwC is engaged as professional auditors.

In the third model, where only *GAAP* issues are included in the compliance index, the variables *legal form* and *minority* are significant and negatively correlated, and the variable *tax base* is moderately significant and positively correlated. In addition, in this model, the dummy variable *Ernst & Young* is significantly separated from the reference group that represents *PwC*. However, in this model, the sign is negative, meaning that that if Ernst & Young was engaged as professional auditors, the water and sewerage business would comply with GAAP issues to a lesser extent than if PwC was engaged as professional auditors. Both *fee* and *population growth* seem to have some kind of positive impact regarding compliance in general.

In sum, legal form affects compliance, particularly with regard to GAAP disclosures. Water and sewerage businesses that are run within the legal form of a corporation disclose more GAAP issues than businesses run by municipal administrations. However, there are no significant differences if you only look at the compliance index that includes only the legal issues. In municipalities with *minority* rule, the compliance with both legal and GAAP issues is significantly less than in municipalities with majority rule. The variable *tax base*, which is a dummy for citizens' interest in municipal decisions, seems to have a positive effect – especially regarding GAAP disclosures. The variable *audit firm* appears to have an effect on compliance, indicating that auditors put institutional pressure on their clients. The difference emerges between Ernst & Young and PwC: while Ernst & Young seems to emphasize the legal issues, PwC seems to stress GAAP issues.

## 6. Conclusions

This study uses institutional theory to 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 issued in 2006.

Most of the organizations surveyed in this study had, in one way or another, taken measures in line with the new regulations; they had disclosed some kind of a full cost accounting report. However, the implementation of full cost accounting reporting within the Swedish water and sewerage sector is still far from complete, as none of them have fully adapted to the new requirements. Our study identified a > 45 per cent deviation from the strictly legal requirements, and the numbers of deviations varied to a great extent among the surveyed organizations. Thus, our interpretation is that the industry has responded to the new regulation by compromise and avoidance (Oliver, 1991). The general results of poor compliance with law and regulations among water and sewerage organizations are in line with previous research regarding compliance with accounting

standards and accounting regulations within the Swedish municipal sector (Falkman and Tagesson, 2008).

That form of association matters is not surprising. Compared to water and sewerage operations that are run under municipal administration, both auditors and managements of corporations are exposed to a much stronger coercive pressure. Our results also confirm the results reported in Tagesson (2007) and are supported by the explanation that deviations from regulations in corporations may lead to legal consequences, while the regulations for municipal administrations have no connection to the penal code (Tagesson, 2007).

The fact that there were positive correlations between compliance and the variables *fee*, *tax base* and *population growth* indicates that the water and sewerage businesses respond to institutional pressure from their stakeholders and supports the idea that higher economic input, through fees and taxes, creates a greater demand for, and interest in, information from the authorities (Jensen and Payne, 2005).

Of the political variables, only *minority* showed a significant relationship. The variables *political governance/political majority* and *change of power* in the latest election were not significant. Because the variable *minority rule* is negatively correlated with compliance, the possible need to signal responsibility and creditability seems, at least, not to be satisfied through cost accounting in the water sector. On the other hand, it indicates the non-significance of the variable *change of power* in the latest election that political competition, *per se*, does not affect compliance with the regulation. Altogether our findings indicate that water and sewerage issues are not high up on the political agenda in Sweden. This might be explained by the high availability of fresh water in Sweden and that the water fee is only a small part of household's total expenses. However, we believe that one of the keys to better financial reporting for the water and sewerage operations is that the results, quality and financial development of the operations will come higher up on the political agenda and that the financial reports will be used in accountability and decision processes.

Contrary to previous studies on accounting practices within the Swedish municipal sector (Falkman and Tagesson, 2008; Tagesson *et al.*, 2013), the variables *size* and *solidity* (financial strength) did not show any significant relationship with compliance. One possible explanation to this divergent result is that the full cost accounting report for the water and sewerage activity is prepared at the departmental level and not at the central level. The water and sewerage department represents a relatively small part of the municipality's economy and has a marginal impact on the economy of the individual households. Therefore, the water and sewerage department may not feel the same institutional pressure as the accounting function at central level, which has the responsibility to compile the accounting for the municipality as a whole.

According to institutional theory, auditors and audit firms may have a normative effect (DiMaggio and Powell, 1983) on the reporting person and are important actors in the process of institutionalizing accounting standards (Jönsson, 1985). Our results show that the audit firms appear to have varying effects on compliance. As for the differences that emerges among firms, one seems to emphasize the legal issues and the other the GAAP issues, indicating that audit firms differ in culture, client base, history, experience and internal structures which influence how they go about their auditing work (Collin *et al.*, 2009).

The main conclusion of the study is that regulation and legislation in themselves have some effect in relation to practice. However, the effect depends on the institutional framework that will ensure and enforce the legislation. The implementation of the new law in 2007, which stated for the first time that the results and the financial position of the water and sewerage operation should be separately reported, has not been supported by other strong institutional settings necessary to legitimize the reform (Carpenter and Feroz, 2001). In the Swedish context, the impact is probably limited by deficiencies in the municipal audit and the absence of sanctions. Thus, with a weak external control over the financial reporting, the level of compliance is, at the end of the day, a discretionary decision made by the reporting entity.

### Notes

1. The cost price principle states that municipalities may not levy charges exceeding the cost of the services or utilities provided by the municipality. The cost price principle does not entail an obligation to finance an activity through charges; instead, a local government can choose to permit an activity to be funded through taxes. The cost price principle thus only entails a maximum level, not a minimum level of charges. The aim of the cost price principle is mainly to protect members of the municipality from monopoly pricing.
2. Full cost accounting: The use of an accounting system that isolates, and then consolidates for reporting purposes, the direct and indirect costs that relate to the operation.

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Accounting issue	Source of regulation	Measure
<i>Legal issues</i>		
Separate Income statement and Balance sheet	The Public Water Services Act	1 = Both 0 = none, one of the two
Disclosure of how the principal has distributed common costs	The Public Water Services Act	1 = Yes 0 = No
Temporary overcharge, income year 2010	The Public Water Services Act, The Cost price Principle	1 = As dept 0 = Equity Capital (= as profit)
Temporary deficit, income year 2010	The Public Water Services Act, The Cost price Principle	1 = Reversal of debt and/or equity capital 0 = receivable
Equity capital	The Public Water Services Act, The Cost price Principle	1 = no equity capital, negative equity capital, corporation: restricted equity capital, resulting from other businesses 0 = positive equity capital, corporation: non-restricted equity capital
Investment funds	The Public Water Services Act, RKR 18	1 = No investment funds or have investment funds and conditions under the law is clear (object, spreadsheet and timetable, refers to the entire community) 0 = have investment funds but conditions under the law is not clear
Making available to the property owners	The Public Water Services Act	1 = Yes 0 = No
Connection fees	RKR 18	1 = Prepaid income (debt) 0 = Complete revenue recognition year 1
<i>GAAP issues</i>		
Disclosure of depreciation method	RKR 11.1, RR 12	1 = Yes 0 = No

(continued)



Table AI

Accounting issue	Source of regulation	Measure
Disclosure of service life	RKR 11.1, RR 12	1 = Yes 0 = No
Disclosure of time frame (periodization) regarding revenue recognition of connection fees	RKR 18	1 = Yes 0 = No
Presentation of income statement according to accounting scheme	Municipal Accounting Act (KRL 1997:617), Annual Accounts Act (1995:1554)	1 = Yes 0 = No
Presentation of balance sheet according to accounting scheme	Municipal Accounting Act (KRL 1997:617), Annual Accounts Act (1995:1554)	1 = Yes 0 = No
Comparison with the previous year, income statement	Published recommendations from The Council for Municipal Accounting and The Swedish Water & Wastewater Association	1 = Yes 0 = No
Comparison with the previous year, balance sheet	Published recommendations from The Council for Municipal Accounting and The Water Industry Association	1 = Yes 0 = No
Sufficient notes to the income statement	Published recommendations from The Council for Municipal Accounting and The Water Industry Association	1 = Yes 0 = No
Sufficient notes to the balance sheet	Published recommendations from The Council for Municipal Accounting and The Water Industry Association	1 = Yes 0 = No
Disclosure of choice of interest expense	Published recommendations from The Council for Municipal Accounting and The Water Industry Association	1 = Yes 0 = No

(continued)

Accounting issue	Source of regulation	Measure
Disclosure of base for calculating interest expense	Published recommendations from The Council for Municipal Accounting and The Water Industry Association	1 = Yes 0 = No
Financial analysis	Published recommendations from The Council for Municipal Accounting and The Water Industry Association	1 = Yes 0 = No
Disclosure of accounting principles	Published recommendations from The Council for Municipal Accounting and The Water Industry Association	1 = Yes 0 = No
Disclosure of the Director's report	Published recommendations from The Council for Municipal Accounting and The Water Industry Association	1 = Yes 0 = No
Disclosure of the goals of the operation	The Municipal Act	1 = Yes 0 = No
Disclosure of essential indicators/measure of efficiency	Published recommendations from The Council for Municipal Accounting and The Water Industry Association	1 = Yes 0 = No

Compromise and avoidance

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