UNIVERSITEIT GENT
FACULTEIT ECONOMISCHE
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ECONOMISCHE WETENSCHAPPEN
ACADEMIEJAAR 1997-1998

Financial Accounting Reform in Flemish Municipalities: An
Empirical Study of Implementation and Annual Financial Reports

1ste Boekdeel: PART I

Proefschrift voorgelegd tot het behalen van de graad van
Doctor in de Toegepaste Economische Wetenschappen
door

Johan CHRISTIAENS

Promotor: Prof. dr. E. De Lembre
Co-promotor: Prof. dr. I. Lapsley

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Due to its importance in international and particularly in European context, this dissertation is written in English although the subject is topical and dominated by Dutch terminology. I chose to use the British English terms¹. Furthermore I would like to thank Mrs De Meyer-Martens for her helpful linguistic support.

¹ De anderstalige jaarrekening: een terminologische gids, L. Uytterschaut, 1991.

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LIST OF ABBREVIATIONS

ABEX	Price index construction industry
AICPA	American Institute of Certified Public Accountants (USA)
ARGC	General Regulations Municipal Accounting (" <i>Algemeen Reglement Gemeentelijke Comptabiliteit</i> ") (Belgium)
BIB	Institute of Professional Bookkeepers (" <i>Beroepsinstituut der Boekhouders</i> ") (Belgium)
CA	Chartered Accountant
CAFR	Comprehensive Annual Financial Report
CFO	Chief Financial Officer (USA)
CI	Compliance Index
CICA	The Canadian Institute of Chartered Accountants (Canada)
CIGAR	Comparative International Governmental Accounting Research
CIPFA	Chartered Institute of Public Finance and Accountancy (UK)
CNOC	Commission for Normalisation of Public Sector Accounting (" <i>Commissie voor Normalisatie van de Openbare Comptabiliteit</i> ")
CPA	Certified Public Accountant
EC	European Community
FASB	Financial Accounting Standards Board (USA)
GAAFR	Governmental Accounting, Auditing and Financial Reporting
GAAP	Generally Accepted Accounting Principles
GAO	US General Accounting Office (USA)
GASB	Governmental Accounting Standards Board (USA)
GFOA	Government Finance Officers Association (USA)
GK	Gemeentekrediet = Crédit communal, the "Bank" of the Belgian municipalities
G/L	General Ledger
IAS	International Accounting Standards
IBR	Institute of Chartered Accountants (" <i>Instituut der Bedrijfsrevisoren</i> ") (Belgium)
ICEAW	Institute of Chartered Accountants of England and Wales (UK)
ICAS	Institute of Chartered Accountants of Scotland (UK)
IDAC	Institute of Accountants (" <i>Instituut der Accountants</i> ") (Belgium)
MD	Ministrial Decree (" <i>Ministriële Besluit</i> ")
MCL	Ministrial Circular Letter (" <i>Ministriële Omzendbrief</i> ")
MFOA	Municipal Finance Officers Association (predecessor of GFOA) (USA)
NARGC	New General Regulations Municipal Accounting (" <i>Nieuw Algemeen Reglement Gemeentelijke Comptabiliteit</i> ") (Belgium)
NCGA	National Council on Governmental Accounting (predecessor of GASB) (USA)
NIVRA	Dutch Institute for CPA's (" <i>Nederlands Instituut van Registeraccountants</i> ")
NFPO	Not For Profit Organisation
NGW	New Municipal Law (" <i>Nieuwe gemeentewet</i> ")

OCMW	Official Centre for Mutual Welfare
OPC	Level of taxation of land (" <i>Opcentiemen</i> ")
P/L	Profit and Loss
PSAAC	Public Sector Accounting and Auditing Committee (Canada)
PSASB	Public Sector Accounting Standards Board (Australia)
RD	Royal Decree (" <i>Koninklijk Besluit</i> ")
SORP	Statements of Recommended Practices (UK)
SPSAC	Statement of Public Sector Accounting Concepts (New Zealand)
VOI	Flemish Governmental Enterprise (" <i>Vlaamse Openbare Instelling</i> ")

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Part I. Research problem

INTRODUCTION

The Belgian Non-Profit and Public Sectors have encountered a number of financial accounting changes and were charged with an increasing responsibility over the last ten years.

There has always been a general tendency of reforming traditional cash accounting towards business-like accrual accounting. The most important examples are² hospitals, municipalities, health service insurances³, pension funds, Flemish universities and Flemish high schools.

For Belgian governmental entities (i.e. municipalities) it was the first time ever that a drastic accrual accounting change took place. Their former accounting regulations (*Regent Decree 10th February 1945*) were based on a budgetary cash accounting system and took a primarily cameralistic point of view.

For the moment there is a similar accounting reform in progress in OCMWs⁴ and the legislator is also considering the reform of other governmental entities such as Provinces, Flemish governmental enterprises, the Ministry of the Flemish Community and even the Central Belgian Government.

In as far as we know, no empirical accounting research with respect to these recently ongoing reforms has been done so far.

The present dissertation firstly aims at examining and

² Hospitals: RD 14th August 1987; Municipalities: RD 2nd August 1990; Health Service Insurances: RD 6th August 1990; Pension Funds: RD 19th April 1991; Flemish Universities: *Flemish Decree 8th February 1995*; Flemish Highschools: *Flemish Decree 28th July 1995*.

³ Health Service Insurances are private non-profit entities providing a number of social and health insurances; they also take care of the reimbursement of the medical expenses.

⁴ An OCMW (*Official Centre for Mutual Welfare*) is a governmental non-profit entity providing a number of additional municipal services such as health care, care of the elderly, etc. Each municipality is related to just one OCMW and vice versa, both providing well-defined municipal services. In Belgium the OCMWs are juridically separated from the municipality, whereas in other countries such entities are part of the municipality.

presenting the empirical outcomes of the financial accounting reform focusing on the Flemish municipalities and their annual accounts. The main theme of this accounting practice study is the compliance with the reformed accounting regulations and the consequent problems and disparities. The subject is mainly treated from a technical-accounting point of view, although the usefulness of the new accounting output towards the users is an important ingredient. This first objective is elaborated using an exploratory, technical examination of the accounting practices based on a survey combined with an extensive set of archival data and interviews. The combination of these research methods will hopefully contribute to the research validity in terms of triangulation.

The second research objective is an attempt to explain the cross-sectional differences in the level of compliance with the regulations. In order to measure an overall level of compliance with regulations and requirements over the different municipalities a *compliance index* will be developed. A number of possibly affecting indicators derived from previous foreign research and from the Belgian topical context will be empirically tested as to their association with the level of compliance. The objective is to try and explain the cross-sectional differences by using ordinary least squares (OLS) statistics.

In methodological terms this second objective is a form of explanatory research examining the possible determinants of the accounting practice differences across municipalities.

A final objective is to measure the extent of comparability of the municipal annual accounts, which is an important condition for the further successful use of the reformed municipal accounting output. This third objective is met through the application of the C-index coming from business accounting research. For this research question the same data sources are used again from a different angle.

The general structure of this dissertation is inspired by the business research methodology of Emory (1980), which implies an important part I research problem, a part II regarding the methodology of data collection and finally the part III results, interpretations and conclusions.

After presenting the background and motivation for the research in Chapter 1, the research objectives are defined in Chapter 2 using prior research as a basis and including the underlying theories and contributions. The research questions are followed by the formulation of the hypotheses to be answered or tested in Chapter 3.

The major concepts and constructs are defined and operationalised in Chapter 4. Chapter 5 gives an overview of the previous governmental accounting research in its different forms categorised according to their relationship with the accounting output (i.e. annual reports). This overview reveals a lack of empirical accounting practice research, particularly in Europe.

Chapters 6 to 11 deal with the methodology of data collection consisting of the applied research methods, the sampling design, measurement of variables, the methods of analysis and lastly the results of a pretesting study.

Chapter 12 reveals some typical technical and conceptual characteristics of the municipal accounting practices.

The remainder of this dissertation is extensively devoted to the empirical findings of the random sample of 100 Flemish municipalities using their annual accounts as well as the returned questionnaires. In an exploratory descriptive way Chapter 13 reports the empirical accounting practice findings whereas Chapter 14 attempts to explain the huge cross-sectional differences. Finally the comparability and the consistency of the accounting outputs is focused on in the Chapter 15.

Hopefully this study will contribute to a better understanding and improvement of transferring business accounting systems to a governmental environment which has been neglected for a long time in terms of accounting. Yet the novelty of the reform, the exploratory character, the feature of researching in an environment which is still on the move and the broad spread of the accounting issues impose a number of limitations and somehow affect the quality and the lay-out of this dissertation.

Chapter 1: Background and motivation

1.1 OVERVIEW AND IMPORTANCE

1.1.1 Overview Not-For-Profit Sector

Based on different financial resources the FASB research report (Anthony 1978, p. 162) distinguishes two types of non-profit organisations:

- type A non-profit organisation: "... whose financial resources are obtained entirely, or almost entirely, from revenues from the sales of goods and services"
- type B non-profit organisation: "... that obtains a significant amount of financial resources from sources other than the sale of goods and services".

In defining group B some authors even separately consider "pure" non-profit organisations⁵ which receive any revenue since sales are completely out of the question (i.e. certain kinds of charities).

According to CICA (1980b, p. 3) non-profit organisations are defined as "enterprises formed for social, educational or philanthropic purposes, which normally have no transferable ownership interests and from which the members or contributors do not receive any direct economic gain." CICA further distinguishes between (p. 3) non-profit organisations that are created for the benefit of its members and those that are created for the benefit of the public.

Below an attempt has been made to give a non-exhaustive classification of the non-profit organisations in Belgium.

⁵ Pure non-profit = "being donation dependent agencies who do not charge fees for services and have almost no unrelated business income" (Zietlow FAM 1989, p. 219).

- Health sector:
 - * Health care institutions, such as general hospitals, psychiatric hospitals, polyclinics, ...
 - * Health and Welfare organisations, insurance sick-funds, ...
- Pension funds
- Education:
 - * Schools
 - * Universities
- Social services:
 - * Trade unions
 - * Child allowance organisations
 - * Social insurance funds
 - ...
- Others such as professional associations, charities, religious organisations, friendly societies, political parties, art galleries and museums, etc...
- Governmental organisations

1.1.2 Overview governmental sector

1.1.2.1 Structure

The Belgian governmental sector can be viewed in different parts. *Firstly*, there is the central government (national, communities, districts, provinces) together with its direct services (e.g. defense, social security, education). *Secondly*, there are the nationalised industries, also called governmental enterprises⁶. *Thirdly*, there are the local governments consisting of (Bouckaert 1986, p. 14; IBR 1995, p. 12):

- * **Municipalities** (NGW - NARGC). In Belgium, the New Municipal Law (NGW) defines and regulates 589 municipalities consisting of 308 in the Flemish District, 19 in the

⁶ For Flanders these organisations are the "Vlaamse Openbare Instellingen" (VOIs) (e.g. VDAB, VIZO, De Lijn, ...).

Brussels' District and 262 in the Walloon District (including 9 of the German-speaking Region)⁷.

- * **Official Centers of Common Welfare ("OCMWs")** (Law 8th June 1976, Regent Decree 10th February 1945) possibly including OCMW-Hospitals (Law 7th August 1987; Law 14th August 1987)

- * **"Ordinary" municipal enterprises**⁸ (art. 261-263 novies NGW, Regent Decree 18th June 1946). Its activities are commercial/industrial or non-commercial/non-industrial. Examples are water and electricity distribution, slaughterhouses, sport centres, etc.⁹

The "ordinary" municipal enterprises are actually a juridical part of the municipality; only with respect to the accounting system can such an enterprise be regarded as a separate entity. Although not explicitly regulated, its accounting system is generally accepted (Bouckaert & Leroy 1996, p. 554) to be regulated by the Law 17th July 1975, which is the accounting law for business enterprises. The "ordinary" municipal enterprise is the only form of organisation which is no juridical entity in itself, but is juridically part of the municipality.

- * **Autonomous municipal enterprises** (art. 261-263 novies NGW, art. 53-67 Law corporations, Law 10th April 1995). According to different sources the only autonomous municipal enterprise is the organisation of harbour installations in Antwerp, although Bouckaert & Leroy (1996, p. 554) explicitly mention that there is no autonomous municipal enterprise established insofar as they know. For this reason the autonomous municipal

⁷ Gemeentelijk zakboekje 1995-1996, Kluwer; Memento Communal 1995-1996, Kluwer.

⁸ The "ordinary" municipal enterprise is often called a "Regie" in Dutch.

⁹ There are totally about 65 such municipal enterprises in Flanders (Boverie, Suykens & Leroy 1995, p. 501).

enterprises are not further considered in this study.

- * Intermunicipal organisations ("intercommunales") (Law 22th December 1986) (e.g. for water supply, distribution of television channels, etc.). Their accounting is explicitly business accounting (Law 17 July 1975).
- * Church governments (Imperial Decree 30th December 1809)
- * Municipal NFPOs ("VZW's") (Law 27th June 1921)
- * Miscellaneous: Polder authorities, watering authorities, ...

Obviously, for different reasons there are a lot of financial, social, juridical relationships among this kind of local governments. They could often be called "related parties".

1.1.2.2 Economic importance municipalities

Belgian municipalities have a yearly budget of approximately 350,000 mio BEF¹⁰. Their expenditures account for more than 5% of the Belgian gross domestic product or 11% of total governmental expenditures¹¹. They vary a lot regarding population, the kinds of areas they cover and functions they undertake.

For an amount of 186 bio BEF the expenditures for municipal personnel accounted for more than 50% of total expenditures¹² in 1994, while expenditures totalled 72 bio BEF for interests and redemptions of outstanding capital. The two other kinds of expenditures were overheads 55 bio BEF and subsidies mainly

¹⁰ The level of expenditures of provinces and OCMWs approximates respectively 50 and 90 bio BEF.

¹¹ Gemeentekrediet, De financiën van de lokale overheden in 1994, p. 12.

¹² Gemeentekrediet, De financiën van de lokale overheden in 1994, p. 15.

for OCMWs 44 bio BEF.

Using a functional classification the municipal expenditures concentrate on education 63 bio BEF and administration 60 bio BEF. Traffic counts for 51 bio BEF and safety for 44 bio BEF. The other kinds of expenditures in 1994 were in declining order culture-religion 40 bio BEF, social care-welfare 38 bio BEF, urbanisation 32 bio BEF, stimuli of the local economy (expansion, agriculture, ...) 13 bio BEF and miscellaneous 17 bio BEF.

The figures of Gemeentekrediet 1994 indicate that the revenues mainly come from:

	bio BEF	%
	-----	-----
Tax revenues	144	40
Funds	80	23
Subsidies	77	22
Debt	32	9
Direct services	21	6
	----	----
	354	100

The funds are mainly contributions from the "Gemeentefonds". The subsidies consist of the financing of municipal education and the recovery of interests and redemption of loans in the form of subsidies from a higher government. The revenues classified under "debts" are the share in profits from governmental enterprises and the interests and redemptions at the expense of third parties.

1.2 COMPARISON PROFIT - NON-PROFIT SECTOR

This section aims at giving an overview and comparison of the profit and non-profit sector, more particularly the governmental sector emphasizing the accountancy issues.

Although often trivialized important, conceptual differences between the characteristics of NFPOs, especially governmental entities and profit sector enterprises will be demonstrated. There are a number of similarities as well, particularly in dual purpose, ambivalent organisations covering profit-minded activities together with non-profit objectives (e.g. governmental enterprises).

An overview of these different characteristics and insights in the underlying differentiating features are essential for a good understanding of the typically governmental accounting environment.

To ensure that the characteristics remain easy to communicate, there is chosen to adopt a tabular overview. The label "non-profit sector" is used to indicate both the non-profit sector in general and the governmental sector in particular.

1.2.1 Objectives

Table 1.1: Comparison profit - non-profit: objectives

NON-PROFIT SECTOR	PROFIT SECTOR
<p>* Objective:</p> <ul style="list-style-type: none"> - The goal is to provide goods or services¹³ to constituents or members, starting from a level of resources available (e.g. taxes) (Rogow & Rezaee AH 1990 p. 52) - Services <--> Costs, aiming at maximizing the providing of services - Income-spending (NIVRA 1992, p. 16) - Social objectives (Henke 1986, Henke 1988) and many objectives that are not always clear, sometimes unattainable (Bouckaert 1986) - Economic aspects less important; revenues and profit are not a target in themselves (CICA 1980b). Thus, earning money by selling products is not a target; the target is the spending of funds, maximizing the return in services rendered. The results of this spending cannot be measured in a traditional P/L account (NIVRA 1989, p. 16). Expenses are incurred in the general interest and are normally not evaluated in terms of economic profitability. 	<ul style="list-style-type: none"> - The goal is the net profit leading to an increase of the net worth¹⁴, the means are the revenues less the costs - Revenues <--> Costs, aiming at maximizing profit - Income-generating - Profit objective - Economic aspects most important; revenues and profit are the target

¹³ The term "services" is used for products, goods and services sensu stricto which a governmental entity may render.

¹⁴ The focus on the net worth and its movements is the main reason for the patrimonial accounting approach.

Table 1.1: Comparison profit - non-profit: objectives
(continued)

NON-PROFIT SECTOR	PROFIT SECTOR
<p><i>* Objective:</i> (continued)</p> <ul style="list-style-type: none"> - The providing of goods and services does not depend on whether or not a profit is being made (De Lembre, Paemeleire et al. 1987, p. 184) - Governments are altruistic because they try to increase the wealth of society and its constituents, citizens; there is a mutual interest (Greenberg & Hillier CIGAR 1995, p. 4) 	<ul style="list-style-type: none"> - Providing goods and services basically depends on making a profit - Profit sector organisations are generally selfserving in that they try to increase their own wealth (privatised interest)

1.2.2 Environment

Table 1.2: Comparison profit - non-profit: environment

NON-PROFIT SECTOR	PROFIT SECTOR
<p>* Ownership:</p> <ul style="list-style-type: none"> - Stakeholders (= constituents, citizens) = Users to whom goods and services are provided. <p>Thus, governmental entities are collectively owned by their constituents (Rogow & Rezaee AH 1990, p. 52).</p> <ul style="list-style-type: none"> - Absence of defined ownership interests which can be sold, transferred, redeemed or which give entitlement to a share (FASB 1980, p. 3) - "Money surplus is not distributable to individuals" (Bird 1981, p. 337) - Absence of transactions with owners, such as issuing and redeeming stock and paying dividends. (FASB 1980 p. 3) - Poor sense of property by citizens and thus less responsibility esteem (Bouckaert 1986) <p>* Players (executives):</p> <ul style="list-style-type: none"> - Politicians, officials <p>* Complexity:</p> <ul style="list-style-type: none"> - High level of complexity¹⁵ 	<ul style="list-style-type: none"> - Stockholders (= owners) <> Users, customers to whom goods and services are sold. <p>Thus, profit entities are solely owned by their stockholders.</p> <ul style="list-style-type: none"> - Presence of defined ownership by means of shares - Money surplus is distributable to individuals. - Presence of transactions with owners - Saving of property is rewarded in economic terms - Entrepreneurs, managers (Bouckaert 1986) - The complexity as far as it occurs can be limited or controlled (Bouckaert 1986)

¹⁵ The providing of goods and services does not depend on the manageability of these items, but on social, cultural, political targets which are quite complex and cannot easily be reduced.

Table 1.2: Comparison profit - non-profit: environment (continued)

NON-PROFIT SECTOR	PROFIT SECTOR
<p>* Continuity:</p> <ul style="list-style-type: none"> - Tends to depend on contributions, taxation resources - Bankruptcy is not possible for governmental entities 	<ul style="list-style-type: none"> - Depends on solvency and economic soundness and the "maintenance" of capital - Bankruptcy is a continuous threat.

1.2.3 Legislation, regulations

Table 1.3: Comparison profit - non-profit: legislation, regulations

NON-PROFIT SECTOR	PROFIT SECTOR
<p>* Legislation, regulations:</p> <ul style="list-style-type: none"> - Due to the absence of the profit motive and hence the difficulties in measuring performance and failure of the marketplace to provide economic mechanisms (Lapsley AAAJ 1988, p. 21), there is the need for more stringent regulations and more legal controls¹⁶. - Legislation: Zimmerman (JAR 1977, p. 110): "Municipalities, ..., employ accounting systems which adhere to strict accounting separation ... because these procedures constrain the public official to behave in accordance with the legal mandate sanctioned by the legislative process." - Regulations lead to less flexibility (Bouckaert 1986) and limited possibilities (Anthony & Herzlinger 1975) 	<ul style="list-style-type: none"> - The profit motive creates an automatic regulating device. The market forces firms out when the economic performance is poor. The money "votes" for the most efficient enterprise. - Zimmerman (JAR 1977, p. 110): "Corporations do not employ such systems because there exist alternative (less costly) procedures for monitoring corporate managers." - "Free" entrepreneurship implies more flexible

¹⁶ Rogow & Rezaee (AH 1990, p. 54) mention:

- restrictions on the organisational structure;
- personnel policies procedures;
- sources and uses of resources;
- accounting, auditing and reporting requirements.

1.2.4 Products-prices

Table 1.4: Comparison profit - non-profit: products-prices

NON-PROFIT SECTOR	PROFIT SECTOR
<p>* Products:¹⁷</p> <ul style="list-style-type: none"> - In general no saleable products or services, except for some directly marketable services - Production of public goods and services which are often unique and inalienable¹⁸ - Obligation to render (public) goods and services <p>* Prices:</p> <ul style="list-style-type: none"> - The provided goods and services are not in proportion to a price paid for it. A number of services are free for the user and are financed by general governmental taxes. This kind of remuneration is special in that <i>firstly</i>, the user cannot refuse to pay the "price": he is supposed to consume; <i>secondly</i>, there is no willingness to pay the unindividualised "price" since there is no direct link between the product and the "price" - In most cases there are no market pricing mechanisms (Pugh FAM 1988 p. 58) 	<ul style="list-style-type: none"> - Saleable products or services - Production of private goods and services; each client is a private owner and has an exclusive consumer right - No obligation to render goods and services as such - Services or products are in proportion to individualised prices - Pricing mechanisms regulate the market

¹⁷ See also Chapter 12, 12.3 COMMUNITY ASSETS.

¹⁸ A very good example of a public good was given by Anthony & Young (1988, p. 277). They present the example of a "lighthouse". This product cannot be provided through a market, since:

- one ship's consumption of the warning light does not imply:
 - * that there is less warning for the other ships;
 - * that the lighthouse responsible can prohibit ships from consuming;
- a ship cannot refuse to consume the light; it is there.

1.2.5 Financing

Table 1.5: Comparison profit - non-profit: financing

NON-PROFIT SECTOR	PROFIT SECTOR
<p>* Financing:</p> <ul style="list-style-type: none"> - The cash-flow is mainly achieved through other means then by selling goods and services on a market. (De Lembre, Paemeleire et al, 1987, p. 164) - For governments the means are provided involuntarily and now and then voluntarily for other non-profit organisations - There is also the possibility of voluntary resources such as grants, contributions and donations. <p>* Invested capital: Is not that important or is not applicable¹⁹:</p> <ul style="list-style-type: none"> - public ownership; - valuation often not applicable; - no stock exchange; - no dividends - performance not measured in terms of return on investment, but based on "value for money"; - financial soundness depends on political decisions of financing (Parkes FAM 1989) 	<ul style="list-style-type: none"> - The cash-flow is realised by selling goods and services on a market. - The means are provided voluntarily in return for agreed services - Largely absence of grants and donations <p>Very important to be able to determine:</p> <ul style="list-style-type: none"> - private ownership; - valuation of the firm; - stock exchange markets; - dividends; - return on investment; - financial soundness

¹⁹ The capital of a non-profit organisation is sometimes even regarded from a negative angle: it could be perceived as the means which have not yet been used for providing services. Thus the larger the capital the more providing of services still to do. Oettle (FAM 1988 p. 276) confirms this existing point of view as he is referencing to Johns, 1943, p. 74.: "The report of an equity or of a net worth gives the impression of wealth in analogy to the private sector. In all cases, however, in which public assets are used to provide goods or services below costs **these assets represent a financial obligation.**" (bold added). Apparently, certain interesting concepts have already existed for a long period, but unfortunately nowadays they are not sufficiently considered.

1.2.6 Budgeting

Table 1.6: Comparison profit - non-profit: budgeting

NON-PROFIT SECTOR	PROFIT SECTOR
<p>* Budgeting:</p> <ul style="list-style-type: none"> - Necessarily budget-oriented - Budgeting serves as an authority instrument for the official. <p>The budget represents the "legal" decision a priori for spending money and is used as a tool for controlling of the spendings as well.</p>	<ul style="list-style-type: none"> - Not necessarily budget-oriented - Budgeting is principally a management tool.

1.2.7 Accounting systems

Table 1.7: Comparison profit - non-profit: accounting systems

NON-PROFIT SECTOR	PROFIT SECTOR
<p>* Accounting systems:</p> <ul style="list-style-type: none"> - Cash accounting: only the receipt or expenditures are recorded, upon which political responsibility in governments is based - Modified Accrual accounting: there is no generally accepted rule. Mostly, this accounting system starts with cash accounting enlarged with certain balance sheet items²⁰. - Debt Charge accounting: mainly concerns (Allen CIGAR 1995) the accounting of fixed assets and their financing. Generally, fixed assets are disclosed less the capital discharged by loans redeemed. Thus, fixed assets are disclosed for their amount still to be financed; depreciations are not applicable. - Encumbrance (appropriations) accounting: this system is more or less similar to cash accounting, albeit that expenditures are recorded earlier, i.e. when there is decided to purchase or to finance. 	<ul style="list-style-type: none"> - Accrual accounting; in governmental context the term patrimonial accounting is often used

²⁰ For governments Zimmerman (JAR 1977, p. 112) defines it as follows: expenditures (other than interest on long-term debt) are recorded when contractually due; revenues (except for property taxes and grants from other governments) are recorded when cash is actually received. In these terms, Modified Accrual Accounting can also be defined as Cash Accounting enlarged with accounts receivable, stock and creditors.

1.2.8 Performance indicators

Table 1.8: Comparison profit - non-profit: performance indicators

NON-PROFIT SECTOR	PROFIT SECTOR
<p>* Performance indicators:</p> <ul style="list-style-type: none"> - The conceptual difficulties to measure the performance²¹ of NFPOs are frequently and unanimously emphasized in the literature. The performance of governments does not depend on their profit making or on recovering their costs of goods and services. Their success is providing goods and services in the most economical and efficient way, which is of course difficult to measure. (Rogow & Rezaee AH 1990, p. 52) - Since there is no easily attainable single measure of organisation performance such as profit, the establishment of an appropriate <u>incentive structure</u> is difficult to achieve (Reed JAPP 1986, p. 113) 	<ul style="list-style-type: none"> - The single measures are basically Net Profit and Return on investment. Profit serves as a management and control tool (Engler & Bernstein 1989, p. 757) - Profitability is an important management incentive

²¹ "Money surplus is not an indicator of success" (Bird 1981, p. 337). "Since their primary objectives are not of a financial nature their performance, to a certain extent, cannot be measured in money terms." (Oettle FAM 1988, p. 272).

1.2.9 Auditing

Table 1.9: Comparison profit - non-profit: auditing

NON-PROFIT SECTOR	PROFIT SECTOR
<p>* Auditing:</p> <ul style="list-style-type: none"> - Auditing is a lot more than certifying a "true and fair view" - Since there is no economic, automatic regulation of economy, effectiveness and efficiency, there is the need for performance audit, also called comprehensive audit or "value for money" audit²². Citizens have the right to know how means have been used and for what purposes (De Lembre, Paemeleire et al. 1987, p. 182) 	<ul style="list-style-type: none"> - Auditing aims at certifying a "true and fair view" of financial statements servicing third parties - Economic market mechanisms lead to an automatic control over effectiveness, efficiency and performance. Operational auditing as it is called in the profit sector remains possible on a voluntary basis.

²² In governments the audit/control prescriptions also contain the "propriety" and legality controls, which are traditionally the domain of the Oversight Bodies.

1.3 TRADITIONAL CAMERALISTIC ACCOUNTING SYSTEM

1.3.1 Cameralistic accounting systems

According to Faber & de Jong (1988) and to Monsen (1995, p. 12) a cameralistic system consists of both an annual budgeting and a bookkeeping system looking after the execution of the budget.

On the one hand there is the Government Council appropriating budgets according to legislation, on the other hand there is the cameral bookkeeper driven by the legal control task: checking whether the use of the budget appropriations is in conformity with the Government Council's decisions.

The main feature of a cameralistic bookkeeping system is the focus on cash possibly enlarged to the stage of the commitments. Activities are recognised the very moment a receipt or an expenditure occurs. The output of such an accounting system is a detailed statement of receipts and expenditures without a balance sheet and without the aim to measure the P/L effect on equity.

A cameralistic system has the advantage that it is simple and fairly objective in its measurements, but, there is little place for managerial information or decision making.

1.3.2 Objective of the traditional budgetary accounting

Traditional budgetary accounting is based on strict regulations of economic cycles and is conceptualised by the Regent Decree 10th February 1945. It was a means to appropriate expenditures and receipts of a community and to avoid deficits. The idea behind the budgetary accounting system was a legislative control²³ mechanism of public funds

²³ This objective existed also in other countries, e.g. Canada: "Because of its importance to parliamentary control, current government accounting has been primarily designed to measure and report compliance with appropriation authorities." (CICA 1980a, p. 14)

and expenditures, not a method to measure the wealth of a community or its performance.

The system consisted of a single entry cash²⁴ accounting without disclosure of balance sheet items.

As such the traditional budgetary municipal accounting system was actually a cameralistic budget (single entry) accounting system, registering and controlling receipts and expenditures.

1.3.3 Basic, organisational principles

1.3.3.1 Separation of functions

In the traditional existing municipal accounting system, the accounts are kept twice in strictly separated "departments".

On the one hand there is the **Municipal Secretary Administration**, of which the Municipal Secretary is in charge. This person is responsible for recording the appropriations and commitments of the budget and decides upon public funds. On the other hand there is the **Municipal Treasurer Administration**; the Municipal Treasurer is in charge of and personally responsible for the cash control and the bookkeeping of receipts and expenditures. Both administrations must keep their own separated accounts.

The purpose of this literal separation, which had been derived from France is "separation of duties" in order to achieve a mutual audit and control.

The municipalities are internally organised as shown below stressing the separation of functions:

²⁴ Basically a cash accounting system but with the extension to the registration of decided commitments (cash + obligations).

Fig. 1: Separation of functions

The elected Municipal Council decides on the appropriation and the use of resources; Mayor and Aldermen, also elected, constitute the Council of Mayor and Aldermen.

The appointed Municipal Secretary (art. 26 NGW) acts as the manager and coordinator of the municipal services under the supervision of Mayor and Aldermen. The Municipal Treasurer (art. 136 NGW) acts as a controller by recording inflows and outflows. He is also responsible for the financial accounting system.

The separation of functions between Municipal Secretary and Municipal Treasurer was set up to provide an internal control and auditing system.

In smaller municipalities (less than 10,000 citizens) it is the Regional Treasurer who is appointed by a higher government as Municipal Treasurer. Normally the Regional Treasurer is appointed for more than one municipality and/or additionally for an OCMW.

1.3.3.2 Technical concept

The budgetary accounting system is technically a single entry accounting, recording cash-ins and cash-outs and taking into account the preceding appropriations.

Apart from a main accounting system consisting of a general

ledger of "definite rights" and "definite commitments", there are additional subledgers including registers and the "sommier" which is a kind of listing of all the capital assets accompanied with their source, purchase price and their date of acquisition. Corresponding data such as depreciation, lifetime, current value are neither known nor accounted for.

The budgetary accounting system consists of the budget (previsional) and the budget account (real outcome); the latter serves as a control tool.

Since 1969 and inspired by the Benelux directives (Khrouz & Umans 1990; Vencken 1995, p. 22) the budget is functional (29 functions) with a number of "budget-articles"²⁵.

1.3.3.3 Separation of services

In the budgetary accounting system a distinction²⁶ is made between two types of services (art. 1 NARGC):

- The Ordinary Service consists of "all revenues and expenditures occurring at least once in the financial year and providing a regular income for the municipality and guaranteeing a regular functioning of the municipality, including the periodical redemptions of loans;" (art. 1 NARGC)
- The Extraordinary Service consists of "all revenues and expenditures directly and permanently influencing the volume, value and maintenance of the municipal patrimony

²⁵ See 1.4.3.2 Link budgetary - financial accounting.

²⁶ The distinction is not always clear and transparent. Since the two Services have different levels of procedures, there is even an incentive to force certain transactions to be treated in an incorrect way in the other Service. This kind of indistinctness and manipulation frequently occurs as reported by different interviewees in the survey. Coeckelberghs (1997) has completely devoted her thesis to this topic.

except for normal maintenance; the term also consists of the similar subsidies and loans, investments and deposits falling due after one year, ..." (art. 1 NARGC)

The flows of expenditures and receipts have to be kept separately and ordinary expenditures may not be financed through extraordinary receipts.

A former third type of service, i.e. Service "voor orde") is abandoned since the reform since the balance sheet has taken over this function.

1.3.4 Traditional budgetary accounting

1.3.4.1 Budgetary principles

A number of compulsory principles regulate the budgetary accounting system (Bodarwé 1992, p. 27; Normand 1992, p. 36; De Braeckeleer 1994, p. 18; Martens, Umans & Blomme 1992, p. III-19-III-26; Vencken 1995, p. 8; Zirolto 1994, p. 12):

- **Annuality:** only the anticipated receipts and expenditures, rights and commitments occurring during the fiscal year from 1st January up to and including 31st December (art. 238 NGW) are considered. In other words budget appropriations for a certain year cannot be used for expenditures of another year (art. 6 NARGC); the disposals of budgets (positive as well as negative) at the end of the year which are of no use have to be cancelled. The yearly budget is voted on October for the coming year.

- **Specialisation:** each expenditure or receipt has to be specified and must not be vague and general; an expenditure budget may only be used for the according items (art. 10 NARGC).

- **Universality:** all expenditures and all revenues must be included in the municipal budget (art. 255, 259 NGW; art. 5 NARGC). Compensation of flows between departments is not allowed.

An expenditure may only be executed if legitimated by an item of the budget²⁷ (art. 247 NGW).

- **Publicity:** the budget has to be discussed and approved in a public Meeting of the Municipal Council (art. 96 NGW). The budgets and accounts are publicly available (art. 242 NGW).

- **Balance:** the budget shall not contain deficits, nor a fictitious balance (art. 252 NGW).

1.3.4.2 Flows and recognition

The stages of the receipts in the revenue cycle and the expenditures in the purchase cycle are legally defined.

It is not possible to present the cycles in a perfect way with everything on it from a juridical as well as a practical point of view. Nevertheless, the two flows and their accounting consequences in both the systems are shown, accompanied by fictitious figures in order to give a impression of the complexity and the factors leading to conflicts between the two accounting systems.

A model of the **revenue cycle** is shown in table 1.10 (Bodarwé & Laurent 1992, p. 21-23, 267-269; De Braeckeleer 1994, p. 31; Vencken 1995, p. 21-22; Zirollo 1994, p. 8-9).

²⁷ Obviously, such a regulation which is acceptable in a budgetary environment, is "dangerous" if it is transferred to a financial accounting system right away. The Belgian reform unfortunately chose for the prevalence of this budgetary rule in the reformed financial accounting system. As a consequence there is no recording of actual liabilities for which there is no budget appropriation. One could have expected that the financial accounting system records liabilities irrespective there being a budget or not.

Table 1.10: Revenue cycle

STAGE	BUDGETARY ACCOUNTING	FINANCIAL ACCOUNTING
1) Definition municipal budget approved by Municipal Council: prevision for 1,200 BEF tax revenues	Budgetary-Article 040/363/03 1,200 BEF	Nihil
2) College of Mayor and Aldermen establishes provisional right ^a 1,125 BEF taxes	Provisional right 1,125	Nihil
3) Municipal Treasurer receives the governor's approval 1,125 BEF	Definite right 1,120	Journal entry: 40001 Accounts receivable: taxes 1,120 @ 70130 Tax revenues 1,120
4) Municipal Treasurer receives bank statement: several constituents have paid their taxes 963 BEF	Nihil	Journal entry: 55001 Cash at bank and in hand 963 @ 40001 Accounts receivable taxes 963
5) Mayor and Aldermen can decide to abandon the account of Mr Jones 29 BEF	Non-value 29	Journal entry: 70130 Tax revenues 29 @ 40001 Acc. rec. taxes 29

^a For some decisions such as construction and building contracting a preliminary approval of the Municipal Council is needed.

Table 1.11 reports a model of the **purchase cycle** (Bodarwé & Laurent 1992, p. 17-21, 270-273; Vencken 1995, p. 19-20; Zirollo 1994, p. 7-8)

Table 1.11: Purchase cycle

STAGE	BUDGETARY ACCOUNTING	FINANCIAL ACCOUNTING
1) Definition municipal budget approved by Municipal Council: 1,000 BEF purchase of goods and services (appropriation)	Entry of the Budgetary-Article 104/123/02 1,000 BEF	Nihil
2) College of Mayor and Aldermen establishes the provisional commitment for the purchase of paper 200 BEF	Provisional commitment 200 BEF	Nihil
3) Order form sent to supplier 200 BEF	Definite commitment (= engagement) 200 BEF	Nihil
4) Delivery of goods accompanied with a delivery form	Nihil	Nihil
5) Receiving the supplier's invoice 190 BEF; comparison with order form by clerck	Nihil	Incoming invoice: provisional journal entry: 49200 Invoices in suspense for charging 190 @ 44700 Invoices to be charged 190
6) Approval and imputation of invoice (= charging) by Municipal Treasurer	Imputation of the Budgetary-Article 190 BEF	Journal entries: 44700 190 @ 49200 190 60711 Goods 190 @ 44000 Trade creditors 190
7) " Ordonnantie ": College of Mayor and Aldermen decides to pay	Nihil	Nihil

Table 1.11: Purchase cycle (continued)

STAGE	BUDGETARY ACCOUNTING	FINANCIAL ACCOUNTING
8) Mandate: i.e. the order to pay given by Mayor and Aldermen to the Municipal Treasurer ^a	Nihil	Nihil
9) Payment order sent to bank	Nihil	Journal entry: 44000 Suppliers @ 58001 Payment in progress (transit)
10) Bank statement (expenditure)	Nihil	Journal entry: 58001 Payment in progress @ 55001 Cash at bank and in hand

^a The ultimate decision to elaborate the payment depends on the Municipal Treasurer. He has the right to refuse, which is regulated by procedures.

For Canadian governments CICA (1980a p. 98) distinguishes between the following possible stages serving as a criterion for recognising the purchase of goods and services:

- "commitment stage: intention to spend
- obligation stage: the intention becomes a legally binding contract;
- expenditures stage: when goods are delivered, services rendered;
- expense stage: when goods are consumed or used;
- disbursement stage: goods or services are paid.

Apparently, the stage in which costs are recognised is when the Municipal Treasurer is charging the invoice. This normally happens when the invoice is received and approved. It is obvious that in a fair accrual accounting year end accounting activities are necessary in order to record accruals and deferrals, cut-off adjustments, reclassifications. If these year end activities are not guaranteed, the accounting practice can be in accordance with the juridical aspects of budgetary accounting flows, but prevents a fair accrual accounting disclosure.

1.4 MUNICIPAL ACCOUNTING REFORM

1.4.1 Background

Different sources (*Report to the King concerning RD of 2nd Aug. 1990*; Normand 1990; Martens, Umans & Blomme 1992, De Neve 1994, Loots & Michiels 1996) attempt to explain the reform principally as a necessary answer to the shortcomings and the rather limited function of the traditional budgetary accounting system²⁸.

Firstly, the traditional cameralistic accounting system, is perceived nowadays as no longer satisfactory²⁹:

- a global view of what a municipality and its management is doing, is not available;
- the budgetary accounting system is merely a legislative control mechanism of public funds, registering and controlling receipts and expenditures; but, without providing management information;
- budgetary accounting only provides an overview on the progress of the municipal budget and is designed as a tool of control; but even as a tool of control budgetary accounting is no longer sufficient;
- budgets are not open to long term previsions since expenditures do not match their corresponding year of consumption;
- assets, liabilities and their changes in time are not accounted for and neither disclosed;
- budgetary accounting information is not sufficiently

²⁸ Some authors have the impression that a governmental accounting reform towards GAAP-accrual is just a means of regaining legitimacy. In their research Carpenter & Peroz (AOS 1992) question the "reasons behind" the accounting reform in New York by claiming that it is a facelift in order to deny the poor financial situation of the city.

Although not scientifically proven, there are rumours in Belgium that the municipal accounting reform was triggered off by the poor financial situation of the cities of Antwerp and Liège during the eighties and by the consequent search for legitimization by disclosing the wealth of the city (assets-liabilities) (Nieuwsblad 1994).

However, this paper does not aim at explaining the reform as such.

²⁹ This conclusion is fairly similar for other ongoing accounting reforms in the public sector.

adequate to sustain cost accounting.

Secondly, the reform aims at transferring³⁰ accounting and management principles and techniques as used in the profit sector.

A rather weak exception is the concept of "profit" and "entrepreneurial tax management", which receives a lot of resistance (Report to the King concerning RD of 2nd Aug. 1990). However, this kind of resistance seems superficial: it mainly aimed at the term "profit" in spite of the fact that actually the conceptual framework of business accounting has been transferred (unthinkingly) almost just like that.

Apparently, business administration tools and techniques are assumed to be useful and transferable without any further proof.

Thirdly, the current budgetary accounting system will not be abandoned since it entails a number of advantages that cannot be denied (Normand 1990):

- the budget incorporates both a **functional** and an **economic** classification; therefore the link to financial accounting is ameliorated;
- it remains a financial management tool in that targets have to be set in advance and in that it is a means of controlling financial flows;
- it is the basis upon which expenditures and revenues are defined and justified;
- budgetary accounting serves as a means of auditing financial accounting.

The above remarks resulted in an enhancement of the budgetary

³⁰ A possible reason for the transferring from business accounting might be that nowadays the Belgian public sector thinks about business accrual accounting as being the one and only correct method. Moreover, they seem to be convinced that this accounting method will undoubtedly lead to better management and to solving occurring financial difficulties. However, the outcome of this idea is not obvious.

accounting system and in an extension towards financial accounting instead of a replacement by financial accounting. Having a budget system as a basis, municipalities are one step in advance as compared to enterprises (De Braeckelee & Denaert 1994, p. 27).

The computerisation of accounting and information systems in administrative environments is often regarded as a major constraint for the success of the reform. This factor is also considered to be the reason for postponing³¹ the reform (Normand 1990, p. 40); whether this is just an excuse or not is not quite clear and remains an open question for research.

1.4.2 Objectives of the reform

The main objective of the reform (*Report to the King concerning RD 2nd Aug. 1990*) was to provide information for users and interested parties in a more complete, objective and transparent way by providing financial information³² on assets and liabilities and by uniting the former cash accounting with accrual accounting. This was all meant to improve:

- internal budget control/auditing,
- external control/auditing with specific regard to Oversight Bodies and citizens³³,

³¹ Although some other arguments (e.g. inventorying and valuation difficulties) could have been invoked, computerisation is almost the only one officially announced.

³² Some authors interpret the objective even beyond the strict scope of NARGC towards user needs: Khrouz & Umans (1991 p. 4/9) state that the goal of the reform is to provide "needed information" that is "reliable" and "fairly readable for everyone"; Leroy (1995, p. 30-31) stresses the user needs including clear information for politicians and citizens.

³³ Sometimes real world examples of financial problems and scandals in municipal contexts are cited as a sufficient reason for improving external control and for using more transparent financial accounting information (Nieuwsblad 1994). The traditional budgetary accounting has been perceived as having weaknesses, which had to be improved by business accounting tools (Zirollo 1994, p. 1).

However, the outcomes of business accounting tools are not guaranteed. The "being seen to do something" is more stressed than "the doing something". This rises the question: is the actual outcome what it was hoped to be?

- financial-economic management (Datoussaid 1992, Normand 1990, Colmant 1994, *Ministrial Circular Letter* 26th Oct. 1990, Leroy 1995). It is generally hoped that Municipal Executives will be better informed about the financial consequences of their decisions by adopting and using the new accounting system³⁴.

This last goal includes the use of balance sheets and P/L accounts and further aims to:

- create economic performance indicators (financial ratios);
- support a preparation of a cost accounting system;
- form a basis for the envisaged introduction of a management accounting system.

All these objectives are fairly similar to the governmental accounting objectives in other countries except for an explicit reference to effectiveness, efficiency (Pina & Vela 1992, p. 8; New Zealand Society of Accountants SPSAC 1987) and economy (Pina & Vela 1992, p. 8).

The changing role of accounting in the public sector is thus obvious: instead of being an ex post recording of financial data and budget to date, the new financial accounting, which has been transferred from business accounting systems, aims at measuring municipal "wealth"³⁵ and at improving financial management.

³⁴ Practical examples are the management of municipal accounts receivables, accounts payable, investment and liquidity management.

³⁵ The wealth is defined as assets less liabilities as is usual in measuring the capital and reserves in business enterprises. However, the definition and interpretation of this kind of concept will not be easy in a governmental organisation.

1.4.3 Description (contents) of the reform

1.4.3.1 Increasing the extent of accounting

The next figure evidences the increasing extent of accounting.

Fig. 2: Comparison Budgetary - Financial Accounting

PREVIOUSLY	CURRENTLY
BUDGETARY ACCOUNTING	BUDGETARY ACCOUNTING + FINANCIAL ACCOUNTING
<p><i>Output:</i></p> <ul style="list-style-type: none"> * BUDGET ^a * BUDGETARY ACCOUNT ^b <p><i>Bases of accounting:</i></p> <ul style="list-style-type: none"> * CAMERALISTIC/CASH (single entry) <p><i>Target:</i></p> <ul style="list-style-type: none"> * CONTROL TOOL 	<ul style="list-style-type: none"> * IDEM * IDEM + * ANNUAL ACCOUNTS ^c <ul style="list-style-type: none"> - Balance Sheet - P/L Account - Notes <p><i>Bases of accounting:</i></p> <ul style="list-style-type: none"> * IDEM + * ACCRUAL (double entry) <p><i>Target:</i></p> <ul style="list-style-type: none"> * IDEM + * PATRIMONIAL VIEW ^d; MANAGEMENT TOOL; USER NEEDS

^a The yearly municipal budget is prepared by the Mayor and Aldermen and it is approved by the Municipal Council and by the Provincial Oversight Body. It consists primarily of budgeted receipts vs. budgeted expenditures/encumbrances. In turn these items consist of a number of so-called "budget-articles".

^b The budgetary accounting system contains the actual outcome of the budget.

^c There is just one legally defined form of annual accounts. This is contrary to other organisations in Belgium like e.g. pension funds which have two different forms of reporting: vertically³⁶ to the Supervisory Control Office and horizontally a more short form to the members of the fund.

^d A patrimonial view means disclosing assets - liabilities and focusing on the resulting "net worth" of the municipality.

³⁶ The terms vertical and horizontal reporting come from Butterworth, Gray & Haslam (FAM 1989) who distinguish these two forms of external reporting by UK Local Authorities.

The new financial accounting system came into effect on 1st January 1995³⁷, whereas the budgetary accounting system is principally unchanged, apart from a few minor adaptations.

The financial accounting change as imposed by the legal reform NARGC is quite drastic. At first sight the whole system has changed in that an accrual accounting system is added to the existing budgetary accounting system.

Questioning the concept instrumentation in archival research Wallace (1991, p. 22) reflects on the following elements which can constitute an accounting change:

- a) change in accounting principles, accounting practices, estimation;
- b) change in valuation rules;
- c) change in disclosure.

In accordance to the Council for Annual Reporting in the Netherlands Vergoossen (1990, p. 4) distinguishes between the same types but adds the criterion of a change in reporting entity. This additional criterion refers to changes in consolidation criteria. Almost the same criteria were the subject in the study of Van der Wel & de Wit (1987, p. 7).

In the Belgian reform all those items are adapted towards accrual accounting except for changes in the reporting entity. Up to now consolidation of municipalities and their perimeter is precluded.

The accounting law is quite rigid and obligatory apart from a few options in the valuation rules.

The final date of adopting the reform is also obligatory, i.e. 1st Jan. 1995. On the other hand the possibility was given to start voluntarily with the adoption of the new system in the years preceding 1995.

³⁷ The regulating law dates from 2nd August 1990 implying a final obligatory application date of 1st January 1995. There was no transitional phase in different steps, albeit that municipalities could choose the date of adoption within the period 1991-1994.

It is to be assumed that such an obligatory addition of accrual accounting could lead to implementation problems and questions such as:

- * The accounting personnel has to familiarize itself with a double entry accounting environment without forgetting the former cash and legalistic attitudes.
- * Will the new financial accounting system be applied as a management tool?³⁸
- * User needs are shown up to the best advantage as an important objective. However, these needs are not determined³⁹.

1.4.3.2 Link budgetary - financial accounting

The budgetary accounting system is still the point of departure for financial accounting. The two accounting systems are fairly well integrated and are linked via the *economic code*⁴⁰ based on the "Budget-article" as shown in figure 3 (IBR 1995, p. 44, De Braekeleer & Denaert 1994, p. 26; Laurent & Bodarwé 1992, p. 215).

The functional code defined by MD 30th October 1990 represents the different municipal services and other cost centres (e.g. 330 Police).

The economic code defined by MD 25th March 1994 represents the nature of the activity looking at the origin ("kostensoorten") (e.g. 111-01 Wages municipal personnel).

The analytical code is optional and has not yet been

³⁸ For the moment this question seems to be wishful thinking. Based on interviews with Municipal Executives the management aspects do not seem to be well-understood. The budgetary accounting system appears to be the only instrument used as before and some of the Executives complain about the additional workload caused by the new system. Moreover, they question whether the additional work will be worthwhile.

³⁹ As far as we know there has been no research attempting to explore and assess external user needs in Belgium.

⁴⁰ Each *economic code* refers to one and only one general account, legally defined by the *Chart of Accounts* (MD 30th Oct. 1990, mod. by MD 25th March 1994 and by MD 29th April 1996).

developed.

Fig. 3: "Budget-article": Link budgetary-financial accounting

A possibility to record opportunity costs in the accounting system does not exist whatsoever. Apart from the automatic link between them, there are a number of possible entries in the financial accounting method which are not recorded in the budgetary accounting system. These unlinked accounts mainly represent depreciations, writing-off's, revaluations and stock movements.

1.4.3.3 Implementation of the reform

A limited number of municipalities⁴¹ have already implemented the accrual accounting practice starting in the period 1991-1994.

These municipalities are partly pilot-municipalities which were asked to try out the new system. The others (i.e. mainly those that started in 1994) have chosen freely for an earlier start. One can assume that these early starters were positive-minded and willing to conduct the adoption.

It would be interesting to examine to what extent the earlier starting dates have led to a better implementation of the new accounting practice. The remaining 283 Flemish municipalities

⁴¹ 2 municipalities since 1991; 3 since 1992; 1 since 1993 and 19 since 1994 or 25 municipalities in total. The earliest are sometimes called pilot-municipalities.

have to adopt the reform at last in the financial year 1995⁴².

1.4.3.4 Reporting and timing

The accounting output consists of the budgetary account, the annual accounts and a report of municipal financial activities (art. 240 NGW). These statements have to be approved by the Municipal Council in the first quarter of the next year. After being approved they are put up for notice in the Town Hall for a period of ten days (art. 242 NGW).

1.4.3.5 Oversight Bodies

After receiving approval the output-statements are then sent to the Oversight Bodies within 20 days:

- District Government (Flemish, Brussels', Walloon)
- Governor of the Province⁴³

Principally, the former controls the budget whereas the latter audits and controls the annual accounts (budgetary account and annual accounts). According to the regulations, both have access to a lot of additional information; they can even visit and survey the municipalities.

It is quite remarkable that in Belgium there is no governmental audit other than the strictly regulated activities of the Oversight Bodies. There is no obligation to assign an external auditor either. According to two interviewed Municipal Treasurers the obligation to assign a chartered accountant to certify the annual accounts as in the private sector as well as in hospitals, pension funds, etc. had been considered in the development of the reform but was refused. The officials feared an uncontrollable overriding

⁴² First balance sheet as of 1st January 1995 and annual accounts as of 31st December 1995.

⁴³ The Flemish District covers 5 Provinces, viz. West-Flanders, East-Flanders, Antwerp, Flemish-Brabant and Limburg; the Walloon District covers 5 Provinces, viz. Hainaut, Namur, Walloon-Brabant, Liège and Luxemburg; the District of Brussels consists of the Capital of Brussels.

influence from business accounting ideas. They were also afraid that the external accountants would not have enough know-how and understanding of the municipal context. These points of view are rather surprising. *Firstly*, the municipalities have principally copied business accounting concepts and techniques without seriously questioning the transferability; so, why not copying the audit function as well? *Secondly*, instead of being able to select the accountant they wanted out of several audit firms, they can now only choose one of the two professional accounting consultants (i.e. Moores & Rowland or Euraccounts).

It is also rather surprising that the Oversight Bodies have not been assigned a task of supervising the accounting reform. For example, Sweden has a useful institutional device to propose and to supervise reform (Pugh FAM 1988, p. 55), the NAB = National Audit Bureau. The NAB is itself a governmental agency. It does not answer directly to the legislature as in the UK. Its primary role is the audit of governmental units and the development of auditing methods. The governmental audit consists of "performance auditing", also called "value for money audit" or "effectiveness and efficiency audit". Pugh admits that some difficulties may arise, such as:

- the risk of potential conflicts and managerial problems when agencies are audited on the basis of their performance by another agency, viz. the NAB;
- performance audit does not always fit in the model of traditional financial auditing in governments.

1.4.3.6 Chart of Accounts

The methodology of using a *Chart of Accounts*⁴⁴ is transferred from business accounting and adapted to the municipal structure. It is then integrated in the budgetary accounting

⁴⁴ MD 30th Oct. 1990, mod. by MD 25th March 1994 and by MD 29th April 1996

structure.

Next to the Chart of Accounts which contains the G/L accounts NARGC has also defined sets of subledgers with so-called individual accounts. The coordinating groups of individual accounts belong to the corresponding G/L accounts. Due to their smaller relevance with regard to the research questions these subledger accounts are not further studied.

1.4.3.7 Importance

Apart from the budgetary accounting method, which is traditionally the cornerstone of a municipality, the financial accounting system has been added as a secondary, more or less "stand-alone" information system. It appears that the financial accounting system is not a *conditio sine qua non* to manage the municipality which could have been expected looking at the primary objectives formulated in the *Report to the King concerning NARGC*.

The role of the new financial accounting system does not seem to be made crucial and indispensable. This idea could be an interesting topic for further research.

1.4.4 Adaptations of the budgetary accounting system

Although the existing budgetary accounting system is maintained and keeps dominating the accounting system, a number of slight modifications have been conducted in the light of the whole accounting reform. The most important are:

- the structure of the economic codes is modified, which disables a comparison of activities with the past (Leroy 1996);
- some output-documents are modified⁴⁵ (Leroy 1996);
- the rule of the extended financial year up to 31th March

⁴⁵ The so-called "koptabel" containing the results of previous years, is replaced by a kind of summary.

of next year is abandoned. According to this rule payments or receipts occurring the 1st quarter of next year could be recognised as happened in the financial year itself (Leroy 1996; Vencken 1995, p. 29-30).

1.5 CONCEPTUAL FRAMEWORK ISSUES

Although this study does not aim at analysing and reporting all conceptual issues in governmental accounting, some relevant concepts need to be emphasized.

1.5.1 Measurement concept

The measurement concept tries to resolve the question:

What does the financial accounting system measure?

The following concepts can be set forward:

* *"Net of debt measurement concept"* (CICA 1980a, p. 36). In this concept only cash and financial claims (receivable as well as payable) are recorded. The result is the surplus or deficit of the year. This concept fits in the framework of cameralistic accounting and the original governmental objective which is the "control of the public purse" (CICA 1980a, p. 14).

* *"Modified net debt concept"* (CICA 1980a, p. 36). This concept is the same as the net debt above, but expenditures on capital assets are separated from the current receipts and expenditures; the results for the year are measured in two statements.

* *"Fund accounting concept"* (CICA 1980a, p. 36; Hay 1989, p. 13; Lynn & Freeman 1983, p. 8-9). A fund can be defined as a separate accounting entity with a self-balancing G/L. Therefore, fund accounting implies the separation of capital and current funds. Referring to Concepts Statement 1 of the National Council on Governmental Accounting (NCGA), Henke (1986, p. 14-15, 101, 131) discusses the accounting bases for the different kinds of funds:

1. Governmental funds⁴⁶: these funds express expendable financial resources and the related current liabilities (e.g. for fire and police protection). According to Henke the accounting system should be "modified accrual" which implies the recognition of revenues when available and measurable and the recognition of expenditures when the liability is incurred and measurable.

2. Proprietary funds: these funds are self-sustaining funds in that they represent business-type activities on user charge basis (enterprise funds) or on a cost-reimbursement basis (internal service funds). The accounting system should be "full accrual".

3. Fiduciary funds: (= hybrid funds) Fiduciary funds concern assets held by government as an agent for third parties such as pension funds, donations. For these funds "modified accrual" or "full accrual" are possibilities.

4. Self-balancing group of accounts (e.g. certain fixed assets) which are held separate for different managerial purposes.

* "Equity measurement concept" (= capital maintenance concept). This is the concept of patrimonial business accounting focusing on equity and its movements due to the financial-economic operations.

In terms of budgetary accounting the Belgian municipalities apply the "Modified net debt concept". The "Equity measurement concept" was introduced for municipal financial accounting.

⁴⁶ Governmental funds and Proprietary funds are also respectively called "Expendable funds" and "Non-expendable funds" (Lynn & Freeman 1983, p. 9).

1.5.2 Reporting entity concept

The reporting entity concept deals with the question:

Who is the entity that reports?

It is noteworthy to mention that principally the accounting entity need not to be the same as the juridical entity: there are examples of juridical entities having two or more accounting entities (e.g. business enterprises with foreign branches); there are also examples of accounting entities which coordinate different juridical entities (e.g. a consolidated group of enterprises).

There are several conceptual bases for defining the reporting entity and its boundaries (CICA 1985, p. 35-36):

- * *"Economic entity concept"*. According to this concept the reporting entity is the local government plus its related parties if they are linked in an economic way (e.g. by transferring resources, complementary activities), in spite of their different juridical form or different managing body.

- * *"Ownership and control concept"*. The criterion to define the reporting entity is the ownership or controllership (financial/legal dependency). In that case, the reporting entity would be the municipality plus the organisations which are owned or controlled by the municipality irrespective of their activity and the kind of relationships.

- * *"Political accountability concept"* According to this concept the municipality has to report all activities and entities over which the municipal governing body is accountable, irrespective of the legal or organisational structures under which the activities are carried on (CICA 1985, p. 35). This concept has the advantage that it also

entails the reports on municipal activities in cooperation with or conducted through private entities or other governments. These kind of relationships which can be very relevant would not have been reported when applying the two former concepts.

* "legal entity concept" (Bodarwé 1992, Martens & Umans 1992, p. I-64, Khrouz & Umans 1991). This concept implies that the legal boundaries of a municipality stand for the accounting entity.

The Belgian legislator has selected this last concept⁴⁷. Therefore, the municipal accounting system only recognises activities carried on within the legal framework of the municipality, separated from third parties in the legal sense, even if there exists a strong financial, political, economic relationship.

Thus, activities of rather strongly related parties such as OCMWs, intermunicipal organisations, church governments, "ordinary" municipal enterprises, etc. are never accounted for in the municipal accounting system. They should not even be disclosed in the municipal annual reports.

Furthermore, an obligatory consolidation of the municipal perimeter is not regulated (Martens, Umans & Blomme 1992, p. I-64, Khrouz & Umans 1991).

1.5.3 Valuation concept: historical vs. current cost

Some Belgian authors are convinced that the valuation rules principally tend to "historical valuation" (Khrouz & Umans 1991, p. 4/10) inspired by GAAP. However, the prescribed valuation rules are actually an amalgamation of historical

⁴⁷ The only two legally regulated exceptions are the "ordinary" municipal enterprise (art. 5 MD 30th Oct. 1990) and a foundation or legacy which has been established in favour of a municipality and whose costs are funded by own revenues, a separate accounting entity has to be created (art. 6 MD 30th Oct. 1990).

cost, current value and a number of surrogates such as insured value, estimated value, a kind of a nominal value, etc.

In addition, most of the immovable fixed assets have to be revalued yearly and unconditionally to keep the value up to date. This last prescription is not at all in line with the principle of historical valuation.

1.5.4 Concluding remarks

There are a lot of views and ideas regarding certain important governmental accounting concepts, which are well developed in Anglo-Saxon countries, particularly in Canada. The Belgian legislator apparently did not pay a lot of attention to this existing standard-setting know-how. On the contrary, from an accounting point of view municipalities are conceptually treated as business enterprises reasoning that the new accounting system will reveal its benefits. However, the application of less suitable business accounting concepts could undermine the usefulness of the new accounting output.

Regarding the valuation concept there is not definition for the end of the measurement. To know better the purpose would have helped to determine the valuation principle more precisely.

1.6 EVOLUTION AND COMPARISONS

1.6.1 The spectrum of current governmental accounting reforms

1.6.1.1 Patrimonial view

The accounting reform in municipalities was the first⁴⁸ drastic accounting change in Belgian governments ever. Different sources attribute the main concept of the change, which is the **patrimonial view** to Prof. de Bارسy (Van Buggenhout 1996, p. 3; Vencken 1995, p. 2), who encouraged the introduction of business accounting concepts aiming at managerial improvements in the local governmental sector. The preliminary work and pre-stage activities of the accounting reform have taken no less than 20 years.

Nowadays in the governmental sector a number of accounting reforms are in planned or are actually taking place. All of these reforms start from the perspective of business-like accrual accounting; the particular term often used is **patrimonial accounting**.

Table 1.12⁴⁹ summarizes the current governmental accounting reforms.

In order to facilitate a comparison, the municipal reform is included. Except for all municipalities and for OCMWs of the Brussels' Capital District⁵⁰ the legislation defining the reform is still in progress. In the other governments it is still in a conceptual stage.

⁴⁸ During the seventies the Belgian social security organism had to work out a double entry accounting system disclosing a patrimonial balance sheet (De Braeckeleer 1996, p. 4; Van Buggenhout 1996, p. 3), but this reform did not get full attention.

⁴⁹ This table is based on the working papers of Braet, Bekaert and De Braeckeleer which were presented during the Conferences Vlaams Instituut voor Overheidsmanagement on 25th October 1996 and 27th November 1996.

⁵⁰ The major example is the Decree of the United Community College of the Brussels' Capital District of 5th December 1996 regulating the accounting systems of the OCMWs.

1.6.1.2 Governments in reform

According to the *Law 15th March 1991* an accounting reform in the State Government as well as in the Provinces is planned. This reform implies a change from traditional cameralistic/cash accounting towards double entry accrual accounting leading to a balance sheet, a P/L account and a budgetary account.

A standard-setting body⁵¹ has already been established. Within the scope of European System of Economic Accounts, it is the Commission's task to develop a reformed accounting system combining the existing budgetary accounting with a patrimonial accrual accounting. This last part is intended (Van Buggenhout 1996, p. 5) to be the basis of the whole accounting system. According to Van Buggenhout (1996, p. 8) the implementation of the reform should start as from 1st January 1999.

Most of the 42 Flemish Governmental Enterprises (= VOIs, e.g. OVAM, VDAB, ...) are used to apply a budgetary accounting system as well as a business-like accrual⁵² accounting system separately. As foreseen by art. 5 *Decree 8th July 1996* an attempt is being made to regulate and integrate the two systems imposing a uniform *Chart of Accounts* to all VOIs. This reform which is still going on, aims at improving the accounting system and to make it a real management tool, initialising consolidation possibilities and increasing comparability and transparency (De Pooter 1996, p. 6). As is also the case for State Government and for Provinces the part accrual accounting will play an important role and will be the basis of the whole accounting system.

⁵¹ This body is the Commission for Normalisation of Public Sector Accounting (CNOC = "Commissie voor de Normalisatie van de Openbare Comptabiliteit")

⁵² This accrual accounting system is mostly the same as for business enterprises (i.e. *RD 8th October 1976*) (Van Buggenhout 1996, p. 3). De Pooter (1996, p. 5) calls it an **economic** accounting system.

Table 1.12: Current governmental accounting reforms

Government	Standard-setters	Pursued Accounting Systems
State Government	* Law 15th March 1991 * CNOC	- Budgetary accounting - Patrimonial accrual accounting
Ministry of the Flemish Community	* CNOC	- Budgetary accounting - Accrual accounting in the framework of the ESR-95 ^a
Provinces	* Law 15th March 1991 * CNOC	- Budgetary accounting - Patrimonial accrual accounting
Flemish Governmental enterprises (VOIs)	* Decree 8th July 1996	- Budgetary accounting - Patrimonial accounting
Municipalities	* NARGC ^b * Office of the Ministry of Internal Affairs * Workgroup New Municipal Accounting being part of the Flemish Community	- Budgetary accounting - Patrimonial accrual accounting since 1st January 1995
OCMWs	* Legislation of the Flemish Community in progress * Flemish Commission for the Reform of OCMW accounting ^c	- Budgetary accounting - Patrimonial accrual accounting in progress

^a European System of Economic Accounts (Bekaert 1996, p. 2)

^b For the moment the legislator is thinking about an extension towards "cost accounting" (Report to the King RD Aug. 2nd, 1990)

^c This commission is called *Vlaamse Commissie voor de hervorming van de boekhouding van OCMWs* and consists of OCMW-Treasurers, OCMW-Clerks and Officials of the administration of Family and Mutual Welfare of the Ministry of the Flemish Community.

According to bekaert (1996, p. 2-3) a similar reform as for the State Government is taken into consideration by the Flemish Community.

The reform which is by far the most developed one at this moment was undertaken by the OCMWs (Sabbe 1996). Contrary to the municipalities which depend on national legislation, the OCMW accounting reform is regulated by Community legislation. Another difference with respect to municipal accounting is that the link between budgetary accounting and financial accounting is technically less stressed, which is considered to be a serious improvement by standard-setters.

The accounting concept is strongly inspired by cost accounting targets and aims at supporting managerial improvements. A function which will be better defined and regulated than in municipalities is the internal and external audit, although the engagement of auditors who are members of professional institutions is not strongly accentuated.

It is rather surprising that the current concept of the OCMW accounting system is not derived from, nor inspired by the existing **hospital accounting** legislation. Hospital accounting was reformed in 1987 and has resulted in a lot of non-profit accounting experience in combination with an external professional audit and Oversight function. Hospital accounting is almost the only legally regulated system which combines financial accounting and cost accounting. It would have been a very good example to elaborate the OCMW accounting concept, all the more since a substantial number of OCMWs also incorporate hospitals.

According to Financieel Economische Tijd (1996) the reform will be implemented in pilot-OCMWs starting 1st January 1998; for the rest of the Flemish OCMWs the implementation is planned to become definite in 2001.

1.6.1.3 Concluding remarks

The governmental accounting reforms all seem to be in line with the patrimonial view. However, some noteworthy remarks and disparities can be formulated.

Firstly, a lack of consensus and unity among the different standard-setters can be noticed. The standard-setters are often different groups of persons working somewhat isolated without being coordinated by a national or international professional body. Such a body could for example have consisted of specialists from the academic world having international contacts and exchanging information.

Secondly, although the subject remains in the same area of governments, different legislators are regulating the reforms from different angles. An example is the municipalities regulated by national legislation contrary to the OCMWs which are also local governments but which are regulated by Community legislation.

Thirdly, there appears to be a lack of a conceptual governmental accounting framework other than copying business accrual accounting. The existing framework of hospital accounting which has demanded a lot of efforts and has resulted in gathering know-how and experience has almost completely been disregarded.

Fourthly, an important feature of the governmental accounting reforms is the introduction of "pilot-projects" (e.g. in the case of municipalities, OCMWs). After developing a first legal concept, pilot-projects are set up in order to become aware of the practical consequences and to achieve insights and feedback from the field. Personally, we feel that such pilot-projects should be considered as tests of the adoption and implementation phase rather than of the conceptual phase. In other words, pilot-projects are not really suitable for testing the concept of the accrual accounting reform. Such a test should precede the implementation phase.

Fifthly, a positive sign is the fact that governmental accounting systems have become discussible instead of being imposed without any possible contestation.

1.6.2 Local government accounting reforms in other countries

1.6.2.1 Overall perspective

It is interesting to observe that at the end of the eighties and in the beginning of the nineties many countries have introduced local government accounting reform more or less simultaneously. The most important **similarity** is the overall **perspective of transferring business accounting systems** to the governmental sector in order to create more informative accounting systems.

In a number of countries (Spain, France, Belgium) the influence of business accounting took shape through imposing a Chart of Accounts derived from business accounting legislation. In other countries the reform of local governments was based on legally enforced regulations. This was the case in Italy, Germany (Vela CIGAR 1997, p. 5; Lüder⁵³, 1995, p. 12), Norway, Sweden and Finland (Volmer 1992, Monsen & Näsi CIGAR 1995, p. 19)⁵⁴.

In The Netherlands the reform⁵⁵ in 1985 was based on a general legal framework that has to be filled in individually, rather than a compulsory meticulous accounting legislation (Volmer 1992; De Mangleer 1994; Bac CIGAR 1995).

Only in the UK the reform took shape through the importance of the accounting profession. Indeed, the Chartered Institute of Public Finance and Accountancy (CIPFA) which is the professional governmental accounting body (Jones 1995, p. 38)

⁵³ According to Lüder the influence of business accounting in Germany was driven by the peripheral sector of satellites around the local governments. Those satellites were using business accounting.

⁵⁴ In general the Nordic countries are civil law countries in which the legislation is the basis for the accounting practices in the governmental sector.

⁵⁵ The reform of 1985 has been adapted in 1995 together with an accounting reform in the Provinces.

is rather unique. In the UK local governmental sector there is a separation of funds: the General Fund consists of assets and expenses which are to be financed by local government tax; there are also the private trust fund as well as pension funds. The pension fund is obliged to be solvent and to have valued its obligations actuarially (Jones 1995, p. 39).

Although the reforms have the same perspective as mentioned above, Vela's study (Vela 1997) evidences a high level of **heterogeneity** in those reforms. Different accounting methods appear⁵⁶, different standard-setting organisations are operating and different relationships budgetary - financial accounting are organised.

1.6.2.2 Different standard-setting organisations

Vela (CIGAR 1997, p. 11-13) distinguishes between the following groups:

- a) Top-down organisation which means that the reform was first applied at central governmental level and afterwards in local governments. This was the case in Spain and Portugal.
- b) Down-top: in this situation the accounting reform first takes place in the local government without interference from the national government. The example is Sweden where the local government reform later became a model for the national government.
- c) Top-down decentralised model: in this model the standards for the local governments is worked out by the national government. This is the case for Italy, France, The Netherlands and Belgium.

⁵⁶ See section Comparison profit - non-profit sector above.

1.6.2.3 Relationships budgetary - financial accounting

Different combinations occur as summarised by Vela (CIGAR 1997, p. 15-16).

- a) In Germany (Vela FAM 1996, p. 212; Lüder 1995, p. 15) and Portugal the financial accounting system is limited to the recording of budgetary flows and transactions.
- b) The budgetary accounting system is linked to the financial accounting system in that the former respects the rules of the latter. This situation is the case in France (Vela FAM 1996, p. 212) with the M-14 where there is an introduction of accruals in the budget itself.
- c) The budgetary accounting system is linked to the financial accounting system, but the two have their own differing rules. Examples are Spain, Sweden and Belgium.
- d) The budgetary and the financial accounting system are to a certain extent independent. This situation is the case in the UK (Vela FAM 1996, p. 212).

1.7 OBJECTIVES FINANCIAL REPORTING GOVERNMENTS

1.7.1 Fundamental objective

Referring to international trend-setting standards the overall objectives of governmental reporting are highlighted below.

As mentioned and discussed in Sharp & Ingram (1985, p. 151), the American NCGA⁵⁷ (1982, p. 2) defines the goal of accounting and reporting for governmental entities as:

"To provide (1) financial information useful for making economic, political and social decisions, and demonstrating accountability and stewardship; and (2) information useful for evaluating managerial and organizational performance."

Later on, in GASB 1987 (Concepts Statement No. 1, p. 20-21) accountability gets more emphasis as an objective:

"Accountability is the cornerstone of all financial reporting in government" ... "Financial reporting plays a major role in fulfilling government's duty to be publicly accountable in a democratic society."

GASB 1987 continues (p. 27-28) stating that:

"Financial reporting should provide information to assist users in assessing the service efforts, costs, and accomplishments of the governmental entity." ... "This information helps users assess the economy, efficiency and effectiveness of government and may help form a basis for voting and funding decisions."

In Australia, the Public Sector Accounting Standards Board, Proposed statement of accounting concepts 1987, par. 40 states:

"Financial reports shall disclose information relevant to the assessment of performance, financial position, financing and investing, and compliance."

⁵⁷ NCGA is the predecessor of GASB.

The issue performance is seen as the 3 E's (i.e. economy, efficiency and effectiveness).

Again in Canada (PSAAC Statement 2, 1984, p. 10) the principle of accountability prevails:

"Financial statements demonstrate the accountability of a government for the financial affairs and resources entrusted to it."

According to PSAAC accountability means providing information to evaluate governmental performance and to assess the compliance with established financial limits.

Summarising in these three countries the stress is on **accountability, performance** and the 3 E's.

From these overall goals a number of more detailed objectives can be derived as shown in the following paragraphs.

1.7.2 Functions of governmental financial reporting

a) A basic function is to provide information on the "sources and uses of resources", viz.:

* to provide information in making resource allocation decisions, which could be called the "financing" of the government (FASB 1980, CICA 1985):

- to report the effect of asset disposals on the financial position of authorities (Cook FAM 1987);
- "to disengage signals to management from decisions about the financing of assets and taxation policy" (Cook FAM 1987);

* to provide information useful in assessing services and ability to provide services; program delivery choices (the services are the end for which the resources are provided) (FASB 1980, CICA 1980a, GASB 1987);

- to assess the government's ability to continue to render services;
- to gather indications of the cash flow potential of some resources and of the cash needed to satisfy obligations; ability to meet commitments (IFAC 1991)
- to measure the economic impact;
- to provide information about certain restrictions on the use of resources (sometimes resources are restricted by providers as to time and for particular purposes)
- to provide information about liquidity (FASB 1980) and financial viability (CICA 1980a, CICA 1985, Hay 1989): to meet obligations as they fall due; it involves liquidity and solvency;
- signaling explicitly the assets owned by local authorities, disclosing municipal wealth, how 'well off' the local government is in an economic sense; capital maintenance (the maintenance of physical capacity to deliver services (CICA 1985));

- full cost data for each major service function provided (Henke 1986, p. 3)
- extent to which service-costs have been recovered through user charges (Henke 1986, p. 3)

b) A second important function is stewardship, performance and compliance, which can be circumscribed as follows:

* to provide information useful in assessing management stewardship, performance and compliance (FASB 1980, CICA 1980a, Volmer 1992, Faber & de Jong 1988):

- information useful in assessing how managers, the ruling party and officials have discharged their stewardship and responsibilities (public accountability).

Governmental management is accountable for:

- * custody and safeguarding of the assets,
- * fiscal, legal, contractual compliance (CICA 1985);
- information on compliance with legally adopted budgets and compliance with legal and contractual requirements, including spending limits (IFAC 1991, p. 19);
- the information has to be readable, understandable and reliable (NIVRA 1992, p. 18, 23-24);

* public sector financial reporting concerns the pursuit of performance measurement:

- effectiveness, efficiency⁵⁸, and economy (how economical resources have been acquired and how efficient the resources have been used). A summary of these performance measurement issues is presented in fig. 4.

⁵⁸ Chandler & Cook (FAM 1986 p. 81) call this function "functional stewardship", but "Unfortunately, the final output ... of most public sector (and hence local government) functions do not lend themselves to measurement."

Fig. 4: Objectives financial reporting

c) A third function concerns regulation and Oversight Bodies:

- * public sector financial reporting provides information to regulatory authorities and Oversight Bodies (CICA 1985);

- * to enhance comparability between local authorities (Cook FAM 1987, Rutherford 1983 p. 158, Faber & de Jong 1988, p. 13);

⁵⁹ The term "Economy" implies the same input for a lower price.

⁶⁰ The term "Efficiency" implies achieving the same output from fewer inputs.

⁶¹ The term "Effectiveness" means the extent to which the organisation's service objectives have been achieved (Henke 1988, p. 8). In other words: "effectiveness" stands for the level at which the output matches a desired goal.

* to provide information regarding intergenerational equity (= interperiod equity), which means the balance over time between successive generations (CICA 1985, GASB 1987).

d) The function of supporting management and providing management tools:

* "to help councillors form judgments about the performance of their own authority" (Rutherford 1983, p. 158);

* signalling about the cost of assets the management is using (Cook FAM 1987);

* providing information for management and management control (De Lembre, Paemeleire et al. 1987, p. 162).

Merrouche & Devlin (1995, p. 48-49) point to the "gradual shift from the **"administration"** to the **"management"** of the public sector" (emphasis added). Also referring to other authors, Merrouche & Devlin attribute the following factors to this shift:

- the introduction of quasi-markets for public services;
- the need for comparable information to enable the audit;
- influence of Activity Based Costing and the search for allocation techniques;
- a continual adoption by the public sector of business management techniques.

e) Lastly, the governmental reporting is provides external macroeconomic information:

* information towards statistics, macroeconomic aggregates. This function is also important for the allocation of sources provided by higher governments.

1.8 TYPES OF GOVERNMENTAL REPORTING USERS

Although this study is not of the kind of "user need research" as shown in Chapter 5: Previous research, it remains relevant to report a succinct overview of the different potential users and their needs.

The different users of governmental reporting can be identified as follows (FASB 1980 p. 15, Volmer 1992 p. 204, CICA 1985, Mayston FAM 1992):

a) Resource providers

The resource providers are an important group of users, which can be classified based on their kind of relationship as shown in fig. 5.

Fig. 5: Resource providers

Compensation	Financial	Not financial
Directly compensated for providing resources	Lenders Investors	Employees Suppliers
Not directly compensated or disproportionate	Grantors Contributors Taxpayers	Grantors

b) Constituents

The constituents can be defined as those who use and benefit the services rendered by the governmental organisation, such as inhabitants, voters, taxpayers or rate payers, fee payers. More in general these service beneficiaries could be called the general public⁶²;

⁶² De Rongé & De Wolf 1996, p. 12 call it: "le grand public dont la préoccupation dominante est certainement d'être informé sur l'utilisation des ressources financières qui sont confiées au secteur non marchand.

c) Regulators

The regulators include the legislator, governing authorities and standard-setting bodies.

d) Auditors, oversight authorities

These users conduct audits regarding effectiveness, legality, efficiency, ...

e) Financial analysts (CICA 1980a)

These users represent external experts in public finance and economists who need financial reports for gathering statistics and in appraising economic and social characteristics of governmental actions. More concrete examples are the financial press, researchers, labor unions, trade associations, ...

f) Elected or appointed representatives and officials

These internal users prepare the financial reports. Therefore, they have the opportunity to apply the reporting more extensively for operational and administrative management.

1.9 RESEARCH MOTIVATION

There are a number of motivating aspects for selecting the subject of governmental accounting research in Flemish municipalities.

Some authors complain about the fact that the public sector accounting is being neglected by academics (Perrin 1981, p. 297; Tomkins FAM 1989, p. ix⁶³; Broadbent & Guthrie AAAJ 1992, p. 4⁶⁴) or they stress the lack of systematic academic investigation of many accounting issues in the public sector (Lapsley AAAJ 1988, p. 21). Referring to the CIGAR Conferences⁶⁵ a number of efforts are worked out internationally by academics and specialists but there is still a long way to go. In 1988 Lapsley (AAAJ 1988, p. 30-31) concluded that: "Perhaps the single most distinctive aspect of this research activity is the absence of a theoretical background which provides a framework for the development of accounting principles and practices in the public sector;". Similar conclusions were drawn by Kurtembach & Roberts (PBAFM 1994, p. 239) referring to Wallace (1983) and Wilson & Howard (1985), who identify "an overriding difficulty in public sector accounting research as the "absence of any paradigm", or even general theory guiding public sector research." Even in the most recent CIGAR 6 Conference 1997 in Milan it appeared that this theoretical background is still missing⁶⁶.

⁶³ "Very, very few academics have investigated the area of local government accounting as a possibility for their research." (Tomkins FAM 1989, p. ix).

⁶⁴ Accounting researchers in the public sector: "... (too few in number to date) ...".

⁶⁵ CIGAR (= Comparative International Governmental Accounting Research) stands for the biennial organisation of international research conferences, organised since 1987. The central theme in the latest Conference 6 in Milan 1997 was on local government accounting.

⁶⁶ This conclusion is based on the kind of issues and approaches of different papers. A concrete example is the interference of J. Chan, University of Illinois, Chicago during the presentation of the paper of J.M. Vela (CIGAR 1997) considering a comparison and explanation of local government accounting in Europe on 6th June 1997. Chan pointed at the Contingency theory

The present study does not aim at putting up such a framework but the knowledge that there is a lack of research is an important motivation for the present study.

Referring to the overview⁶⁷ of Flemish governmental entities it is clear that the municipalities have an important economic, financial and social role which is now getting a new dimension by introducing business-like accrual accounting.

So far no one has ever worked out any research on the subject of governmental accounting practices in Belgium or more particularly in Flanders. Even for the broader non-profit sector research activities are very scarce⁶⁸.

There has been no empirical research in Flanders to the effects of the accounting reform in municipalities, neither has the role and importance of "barriers" (resistance to the innovations and to the adoption of the new system as defined by the "Contingency theory"⁶⁹) been tested.

The reform is a novelty in Belgium: municipalities are mainly the first non-profit governmental institutions being reformed with a new accrual accounting system. This reform creates a lot of questions concerning the implementation phase.

The development and the extent of the implementation is a challenging issue to examine.

Verifying the degree to which the reform has been implemented and studying the different related problems seems an absolute necessity. So far there is no empirical evidence as to the extent of compliance with the new regulations and with the

developed by Lüder in the beginning of the nineties and which is still the only guiding framework in public sector accounting.

⁶⁷ See Chapter 1, 1.1 OVERVIEW AND IMPORTANCE.

⁶⁸ An opposite example are some accounting and management studies in hospitals.

⁶⁹ According to Lüder's "Contingency theory" (1990) the size of the municipality and the quality of the accounting staff are acting as barriers.

accounting standards as foreseen in the NARGC.

As formulated by Lin, Baxter & Murphy (FAM 1993, p. 239) there would be a danger of failure if the efforts of the reform are devoted to standard-setting and regulations only and if they neglect the compliance issue and its outcomes.

Volmer (1992, p. 48) even questions the effectiveness: "The crucial question is whether the regulations - even when they are implemented - are effective ... One cannot assume without further proof that the new regulations will have merits. Therefore, empirical research is needed." (translated).

Disregarding the factual compliance during an accounting change and assuming that regulations will be implemented automatically could be a methodological threat in business accounting research⁷⁰ as well where one of the authors did not take the compliance issue into account (Auer 1995).

The present study assumes that the power of the new accounting legislation and its merits depends strongly on the quality and comparability of the compliance factor.

In light of an examination of the usefulness of municipal reporting Daniels & Daniels (JAPP 1991, p. 35) stress the characteristic of comparability referring to GASB 1987 Concepts Statement No 1: "One of the basic characteristics that municipal financial statements should have is comparability (GASB 1987, p. 22).".

In Flanders, no study to date has looked at the comparability of the municipal annual accounts.

For the moment municipal executives are trying to interpret the published annual accounts; courses are set up to teach them to analyse the medium of annual accounts. These kinds of users need information on the merits and problems of the reform. Questions arising around the adequacy of the outcomes is an important incentive for this research.

⁷⁰ See Chapter 2, 2.3 VARIABLES IN BUSINESS ACCOUNTING RESEARCH.

The study might have concentrated on issues such as the usefulness of the new accounting output for municipal executives, relationships with management control systems, consequences in terms of financial management, etc. All these subjects are very attractive, but in conformity with the defined phases of Abdel-Khalik & Ajinkya⁷¹ it is too early yet for these kinds of interesting research questions. The municipal accounting reform is still in its early stages. Undoubtedly, questions in the domain of management research, finance, use of new accounting information will come into order during the next couple of years.

One also could have promoted the studying of user needs: "The issue of whether the information contained in local authority annual reports and accounts meets the needs of potential users is a matter of considerable importance." (Collins, Keenan & Lapsley 1991, p. 35). Yet, a preliminary and important question is whether the information contained in the annual accounts meets the prescribed regulations and requirements.

For the moment "time is ripe": the reform took place in 1990 with a final period of adoption in 1995. Already 25 Flemish municipalities started their adoption in one of the four years before 1995. The annual accounts of the majority of them were published in the middle of 1996. The reform can be described as a kind of a legally condoned and imposed experiment. The accounting researcher is fortunate to be able to observe and analyse this interesting process at this moment.

Another important reason for this research in Flanders is the fact that accounting standards and regulations for

⁷¹ According to Abdel-Khalik & Ajinkya (1979, p. 12-13) there are historically 3 phases in accounting research:

I/ Research problems dealing with processing problems of economic transactions;

II/ Research problems about accounting reporting;

III/ Research problems concerning the users of accounting information.

Phases II en III occur in a later stage after the period of implementation; in a new accounting system or during a reform mainly phase I research problems are prevailing.

municipalities are different from those in other countries. In other words the different accounting systems are very topical. This means that findings and conclusions in other countries are not representative as such for the adoption process in Flanders.

In general accounting changes are a frequently studied research subject: "The nature of rules, the effects of changes therein, and economic implications are the subject matter of considerable research in accounting." (Wallace 1991, p. 55).

Chapter 2: Research objective

2.1 RESEARCH PROBLEM AND QUESTIONS

In the field of governmental accounting research⁷², a number of efforts has been made to study accounting systems and practices as the finality of the study. In technical terms one could say that in this type of research the accounting systems are the "dependent variable". This kind of governmental accounting research can be divided in the following groups:

a.1 Studies explaining governmental accounting reform from a traditional rather "cash accounting" system to a "business-like" accrual accounting system. Examples of research questions are: What is the origin of the reform process? What explains the decision to adopt GAAP? What are the causes and reasons for governmental accounting innovations? ...

These studies tend to be model-building, deductive, theoretical and often without empirical support.

a.2 Research concerning norms, accounting standards, principles which influence accounting methods; the search for and the definition of accounting frameworks sometimes inspired by user needs. This kind of research is often normative and theoretical.

a.3 Research studying socio-economic-political factors which influence accounting methods and practices. Some of these are based on the "agency theory" considering the accounting output as a means of monitoring the agent.

Most of these studies are empirical looking at cross-sectional accounting disclosure differences and attempting to explain these differences from a socio-economic-political angle.

⁷² These groups of research are discussed and commented together with their scope and particularities in Chapter 5: Previous accounting research.

An important second field of study is the examination into use and consequences of accounting data and financial reports. This kind of governmental accounting research can be classified as follows:

- b.1 Management accounting and its use of financial accounting data;
- b.2 Budgeting and its link with the financial accounting system;
- b.3 Financial management using accounting systems and data;
- b.4 Capital asset management and investment decisions based on accounting information and accounting practices, depreciation accounting, accrual instead of cash, ...;
- b.5 The use of accounting information for pricing decisions of provided municipal services;
- b.6 Measuring performance indicators based on accounting information; Service Efforts and Accomplishments (SEA);
- b.7 Studies in which user needs, perceived usefulness, accountability affected by the accounting system are examined;
- b.8 The effects of accounting data and methods on stock market measures, bond ratings of governments and municipalities; information for investors, creditors;
- b.9 Relationship accounting systems and auditing;
- b.10 the effects of governmental accounting reports on political behaviour.

These two directions (a.- and b.-) of research in governmental accounting can unidimensionally be visualised as shown in

figure 6. This way of representation is in correspondence with the view of Watts & Zimmerman (AR 1990). They call the "b. series" the "information perspective" with the underlying assumption that accounting numbers supply information for security market investment decisions. The "a. series" encompass Watts & Zimmerman's predicting and explaining of accounting choices.

Fig. 6: Structure of governmental accounting research

A first problem is that the existing research attributes less attention to the phenomenon of the adoption and implementation of reformed legislation and regulations in the "real world". There is no empirical evidence as to the extent and quality of compliance with legal requirements and regulations that changed by municipal accounting law (NARGC).

Very often researchers assume that adoption of accounting change happens immediately and completely; the extent to which the regulations are implemented during and after an accounting reform, is not explored⁷³. The real world compliance of governmental accounting practice with legislation and accounting regulations is often neglected.

The researcher has to ask himself whether the standards, regulations and requirements caused by or imposed by a reform are complied with in actual accounting systems, before measuring possible uses and characteristics. Even the researchers focusing on the *disclosure index*⁷⁴ are testing the hypothesized factors, but without analysing the accounting process; the research involving exploration of accounting processes and output on the other hand is not looking for an explanation.

This first problem leads to research question 1 and 2:

- RQ1 *Have municipalities complied with the reformed accounting regulations regarding financial accounting practices and reporting, contained in the accounting legislation?*
- RQ2 *What are the major areas (problems and differences) of non-compliance (if any) in the municipal accounting practices?*

A second problem is the lack of empirical research attempting to explain cross-sectional differences in adoption and

⁷³ Regarding time-series analysis in corporate accounting research, Ball & Foster (JAR 1982, p. 179) mention that "accounting changes" and other institutional aspects are not enough incorporated: "some studies appear simply to ignore accounting changes, ...".

⁷⁴ See Chapter 5: Previous accounting research.

implementation of reformed municipal accounting practices. As discussed in the section previous research there are a few foreign studies that attempted to explain cross-sectional differences in accounting practices, but firstly they focus on disclosure and they do not emphasize the technical implementation issues phase; secondly, they do not cover the topical characteristics of each country or jurisdiction; thirdly, the results of those studies are not congruent but sometimes rather contradictory.

Thus, research question 3 can be stated as follows:

RQ3 *Can the cross-sectional differences and problems be associated with explanatory factors derived from previous research and from the Flemish context?*

A third problem for which no research in figures has been done in municipal accounting reporting context, is the comparability of the municipal annual accounts. This subject covers the compliance with the reformed accounting regulations which intended among others a harmonisation, as well as the usefulness of the accounting output to the users. This problem results in research question 4:

RQ4 *To what extent are the reformed municipal annual accounts comparable?*

2.2 GOALS OF THE STUDY

2.2.1 Contributions to theory

The goals of the present study are the improvement of the theoretical insights.

A first goal is to explore and describe the adoption and implementation of the compulsory financial accounting reform in Flemish municipalities. The annual accounts which are the product of the accounting system obviously play an important role in the research.

This includes also the analysis of the concept of the reformed accounting system and the formulation of conceptual differences with business accounting practices.

A third goal is to know more about the areas of non-compliance with the law, regulations and requirements and to detect problems encountered with adoption of accrual accounting. The consequent goal is to achieve insights into the technical differences in adoption and implementation and into the degree of variation across municipal accounting practices.

Explaining those cross-sectional differences in municipal accounting practices is a fifth intended contribution. In previous governmental research there are some factors put forward (e.g. the "barriers" of Lüder's "Contingency theory": government size and accounting staff qualification).

An important factor to consider is the experience in the adoption process. Are the experienced municipalities really better performing in compliance than the others. In other words is experience a relevant factor?

Apart from the question of the compliance and the succeeding of the reform a seventh goal is to look at the level of comparability, harmonisation of the accounting output. Was the

intended harmonisation and comparability achieved or are there still important valuation and accounting differences which prohibit comparison?

Different studies in governmental accounting revealed an important heterogeneity. Some important differences and variance in accounting and reporting practices appeared: to what extent does this also occur in Flanders?

This examination is needed because for the moment, some users are preparing financial analysis of municipalities by means of ratios copied from businesses and corporations⁷⁵.

The municipal accounting system is transferred from business accounting. Therefore, the eightest goal is to test the transferability of a business-like accounting framework to a municipality environment. In 1977 Zimmerman (JAR 1977) already indicated the need for questioning scientifically the transferability of business accounting concepts⁷⁶. While his concept was also stressed by Lapsley (FAM 1995), who calls it portability, research efforts on this issue are rather seldom seen. One of the goals is to know more about the efficiency and the way of implementing the new accounting regulations in an environment which has no experience in "business-like" accounting, to see whether the implementation in practice will lead to the improvements required.

The general purpose of the study is an appraisal of the merits and the usefulness of the accounting reform in Flemish municipalities. It focuses on the compliance of this reform since all the merits depend thereupon and because this compliance is not guaranteed: "We should not assume that an appropriate standard-setting mechanism will naturally gain acceptance and thereby guarantee compliance" (Lin, Baxter &

⁷⁵ In "In de rand van de jaarrekening" (1995) officials are already working out ratios to analyse financially the annual accounts.

⁷⁶ "Relying on commercial accounting experience, the reformers assert that users will find the supplementary statements useful. But they do not demonstrate that the corporation analogy is valid." (Zimmerman JAR 1977, p. 109).

Murphy FAM 1993, p. 239).

A final goal is an attempt to answer the question: Does the measuring of the patrimony (wealth) of the municipality become possible as it was intended by the reforming law or should it be redefined? Can the "wealth" of a municipality be measured?

Except for measuring the compliance no attempt will be made to appraise the municipal accounting system *per se*.

This study is neither intended as a "debate" around advantages and disadvantages of certain business-like valuation rules, neither about the pro's and the con's of the accounting reform.

The present study does not attempt to examine the causes or reasons of the accounting reform, nor the evolution; it is just concentrated on the outcomes of the prescribed reform.

The aim is to focus on the real-world compliance and related problems of the new accounting regulations in municipalities, combined with possible explanations. Of course, certain parts of the study will imply further debates as a spin-off.

In contrast to a number of accounting research studies in which prescriptions are generated, normative theories are emphasized and debates are run into, this study is aimed at explaining and understanding⁷⁷ the municipal accrual accounting.

2.2.2 Contributions to practice

This study will hopefully lead to a number of improvements and spin-offs.

This study aims to provide insights relevant to practice,

⁷⁷ In contrast to prescriptive, normative research, Watts & Zimmerman (AR 1990) argue (p. 150): "For example, some accounting instructors teach that certain accounting methods (e.g., current cost) are better than others (e.g. historical cost). But, no explanation is offered why these "better" measures are not adopted." This statement again proves the importance of adoption of methods, rather than discussing the quality of the method.

to result in a better understanding of the practical adoption problems. The aim is to deliver information and conclusions concerning the reform from cash to accrual, which could be used as a feed-back to **standard-setters**. Such empirical know-how could be interesting also for other ongoing or forthcoming accounting reforms in Belgian governmental and non-profit organisations, such as:

- 3rd level Flemish high schools,
- universities;
- OCMWs;
- Provinces, etc...

Secondly, the study will hopefully facilitate an appraisal of the usefulness of the accounting reform to users (usefulness of financial statements) and to accountability.

Feed-back to **municipal staff** training and assistance will be possible and the study could deliver some ingredients and suggestions regarding governmental auditing and other applications of accounting information (managerial accounting, budgeting, cost accounting, ...).

A better assessment of needs in the governmental accounting system can hopefully become more clear: educational, training, follow-up, assistance, internal audit, ...

The study is meant to be understandable and helpful for **practitioners**⁷⁸ who are related to municipal accounting, such as external consultants, chartered accountants, municipal software-specialists. The findings could be related to the problems they are facing in municipal accounting.

In practice there appears to be a lack of knowledge as to how accounting outputs should be used by the **users** such as voters, citizens, creditors, ... A model or concept as to how accounting outputs, viz. the annual accounts should be used is as yet non-existent. Neither has the role of the additional

⁷⁸ This is also the wish of certain persons combining the functions as academic and practitioner like Leisenring & Johnson (AH 1994).

patrimonial information presented in the annual accounts been defined. Hopefully this study will contribute to find a solution to this problem and to open up new horizons in the user perspective.

Concerning the main deficiencies in accounting education in Belgian universities, the UNCTAD states only the following: "the requirements are generally considered to be satisfactory. One of the areas which needs further improvement in accounting is the public sector."⁷⁹ Hopefully this study can deliver educational improvements in the Belgian academic world.

⁷⁹ United Nation Conference on Trade and Development (UNCTAD), International Accounting and Reporting Issues, 1993 Review, New York and Geneva, 1994, p. 121.

2.3 VARIABLES IN BUSINESS ACCOUNTING RESEARCH

2.3.1 Accounting change in business accounting research

Several studies in business accounting research aim at measuring the consequences of voluntary or compulsory accounting changes, reforms, modifications of valuation rules, etc.

Without being complete, some examples can be highlighted.

In his PhD study, Leftwich (JAE 1981) predicts that mandatory changes in accounting principles have an impact on the value of a firm's equity. The assumption was that accounting changes affect measurement rules defined in lending contracts, which in turn has an implication on the firm's equity. Even if the changes were merely disclosing (cosmetic) changes, he found a significant effect on the equity.

Leftwich himself (JAE 1981, p. 4) refers to three similar studies of 1979 concerning the effect of mandatory changes in GAAP on the equity values of industrial and commercial firms.

By means of a cross-sectional analysis Collins, Rozeff & Dhaliwal (JAE 1981) examined market effects of mandatory accounting changes in the oil and gas industry.

Balsam, Haw & Lilien (JAE 1995) made an interesting study concerning the choice of methods and the timing of adopting mandated accounting changes. FASB permits flexibility in adopting mandatory accounting changes *firstly* by allowing different implementation methods: the effect of the accounting change could be passed to the *P/L account* or directly to the *balance sheet*.

Secondly, the adoption was allowed to take place over a period of time in order to allow the management a certain flexibility.

Concerning the first allowance, Balsam, Haw & Lilien found that equity increasing changes are mostly reported as income,

whereas equity decreasing changes are recorded as adjustments to stockholders' equity. Therefore, they conclude that FASB attempts to minimize the implementation cost to reduce its "political costs".

Furthermore, concerning the timing, the study reveals that when management expects an effect of higher adoption income, the implementation is accelerated.

The impact of voluntary accounting changes in profit sector enterprises was examined by Holthausen (JAE 1981) in his PhD thesis, namely the switch from accelerated to straight-line depreciation. Holthausen noted an effect of the accounting change on the value of the firm, but he could not answer the reason why managers change accounting techniques (JAE p. 75).

Foster (JAE 1980) searched for the impact of (voluntary) accounting policy decisions on the capital market of profit organisations. He focused on some aspects of the research design when predicting (how, what, when) the impact on the capital market.

In the Belgian context, Beghin (1983) empirically examined the information function of annual accounts on capital market decisions in the framework of external user needs (investors). One of his major research questions was the information effect of a voluntary change in accounting methods. The accounting change consisted of the possibility to depreciate fixed assets *ad libitum*⁸⁰ instead of according to traditional depreciation rules between 1st March 1977 and 30th June 1978.

Beghin selected a sample of stock exchange enterprises which applied the *ad libitum* depreciation of 100% and a control group which did not change their depreciation policy. Based on empirical tests using financial statements, he revealed that there was no significant information effect on the capital

⁸⁰ *Ad libitum* means that one could choose freely the depreciation rule for fixed assets: straight-line depreciation over an arbitrary number of periods or 100% depreciation in the first year or another scheme. Once chosen, the rule could not be modified anymore.

market.

In The Netherlands, Van der Wel & de Wit (1987) prepared an empirical study questioning the information effect of voluntary accounting changes. An additional research objective in their paper was the search for possible factors behind the accounting changes. They used empirical data and annual accounts of stock exchange enterprises during 1978 to 1982. Their results are various. Some results confirm existing theories, other findings enlarge the ideas. In lign with Balsam, Haw & Lilien above, they concluded that the timing of an accounting change is often influenced by management perspectives.

For specific sectors, such as retail land and real estate, Hughes & Rick (JAE 1984) measured the stock exchange effect of accounting changes.

Not only the *Journal of Accounting and Economics* (JAE) publishes research on accounting changes, in the *Journal of Accounting Research* Eggleton, Penman & Twombly (JAR 1976) examined the relationship between the accounting change in inventory valuation to LIFO and changes of external auditors and the management personnel.

In his PhD proposal 1990⁸¹, Vergoossen tried to set up a study taking accounting changes and the users of annual reports as its the central theme: "Are accounting changes incorporated adequately in the judgements or decisions of the users of annual reports?" (p. 3) and can accounting changes therefore be used by the management?

For Switzerland, Auer (1995) examined the influence of a change in accounting standards on the risk parameters of quoted firms. The accounting standard change was defined as a

⁸¹ Paper presented at the Touche Ross European Doctoral Colloquium, Budapest, april 15-17, 1990.

change⁸² from Swiss accounting standards to either IAS or EC-Directives in the period 1988-1993.

The background for this kind of change as an independent variable was that stock exchange firms had to reconcile their domestical Swiss financial statements to IAS or EC-Directives to be able to obtain a quotation on international stock exchanges.

The results of Auer's empirical study, viz. the effect of modifying accounting standards on risk parameters, were not convincing. He failed to consider and test the actual rate of implementation of the IAS or EC-Directives. He implicitly assumed that there was an automatic compliance in practice, which can be doubted.

Although not proven, one could argue that the possible lack of practical implementation disturbs the results and explains the insignificant relationship.

In a review of their "positive accounting literature" publication of 1978, Watts & Zimmerman (AR 1990, p. 138) discuss two types of tests of their theory: stock price tests with price reactions to mandatory accounting changes and accounting choice studies. In the former, mandatory accounting changes are the independent variable; they mention a number of studies in which this factor is examined. The latter attempts to explain the choice of an accounting method (e.g. choice of valuation rules).

Obviously in business accounting research, a lot of studies concentrated on the consequences of mandatory as well as voluntary accounting changes in a variety of possibilities.

⁸² This change contains an adaptation (revaluation, reclassification, adjustment) of the disclosed financial statements, rather than a reform of the inherent accounting system per se.

2.3.2. Implementation of accounting changes

Considering implementation of a reform as a dependent variable is also an important research factor in business accounting research in different contexts.

With respect to a forthcoming PhD thesis Struyven & Macve (1995) described, based on field research, the influence on the EC insurance accounts directive and the implementation of key features of the EC directive in different European countries.

As a second example one could refer to the article of Balsam, Haw & Lilien (JAE 1995) mentioned above, in which the timing of adoption and the different ways of implementing mandated accounting changes were examined.

2.4 LIMITATIONS OF THE RESEARCH

The present study is not set up to explain the reasons of the reform, neither is it an analysis or an appraisal of the impulses or incentives behind the reform.

The attention is restricted to financial accounting with its reporting. This term includes the statements published by municipalities (i.e. balance sheet, P/L account, Notes by virtue of RD 2nd August 1990).

Excluded is the financial reporting solely intended internally for decision making and control. Excluded are also secondary "internal" reports such as reports or statements for the Rekenhof, Provinces, ...

The study only consists of the part of accounting concerned with financial reporting to outsiders (voters, citizens, taxpayers, possible external users, etc.).

Although strongly looking at the accounting output and inspired by the usefulness, the present study is intended as a rather technical *"accounting practice research"*, not a *"user need research"*. As such the technical point of view is strengthened with user need aspects.

The study is based on the assumption that the mandatory accounting reform is exogenously imposed. According to Leftwich (JAE 1981) changes result from economic forces. It is difficult to detect whether a) the imposed accounting change by legislation and regulations as such is the autonomous factor or b) the economic forces that led to the accounting change are the autonomous factor. In other words, is the accounting reform implemented in municipalities because of the law and regulations as such or is the implementation affected by the need to improve accounting which caused also the accounting reform? (Leftwich JAE 1981, p. 10). This question would be interesting to examine but it does not belong to the

scope of the present study.

In many respects this study deals with a new subject. Governmental accounting is a novelty and in a manner of speaking it is still in its early steps in the Belgian context. At the same time the object of the study covering the accounting reform in municipalities is completely new. It seems reasonable to posit that as a consequence the research domain becomes very extensive with relationships and tentacles to other fields of study.

Therefore many questions attracting a great deal of attention will remain unanswered. Jensen calls it an optimisation problem. Regarding empirical corporate accounting research Jensen⁸³ (JAR 1982, p. 240) believes that the criterion of perfection should not be used to judge scientific research: "I know of no papers that have proposed and answered all questions in an area - even the pathbreaking contributions to capital structure theory made by Modigliani and Miller ...".

⁸³ Jensen reviewed the article of Ball & Foster (JAR 1982) which consisted of a large and important methodological review of empirical research regarding corporate financial reporting.

2.5 UNDERLYING THEORIES

2.5.1 Positive accounting theory Watts & Zimmerman

2.5.1.1 Definition

The positive accounting theory considers political and economic factors in explaining and predicting different accounting methods.

According to this theory developed in a business environment differing accounting choices affect the firm's value. The three kinds of hypotheses most frequently tested (Watts & Zimmerman AR 1990, 138-139) and having positive results are:

- Bonus plan hypothesis: managers of enterprises with bonus plans are more likely to use accounting methods that disclose increased current income.
- Debt/equity hypothesis: a high ratio is related to accounting methods resulting in increased income in order to relax debt constraints.
- Political costs hypothesis: large enterprises whose size is a proxy for political attention tend to apply accounting methods which reduce the disclosed income.

About this last empirically proven hypothesis Watts & Zimmerman (AR 1990, p. 140) seem a bit surprised and they are not really convinced but they demonstrate that there is no alternative theory explaining the encountered regularities.

2.5.1.2 Applicability in the governmental sector

The theory of Watts & Zimmerman which could be called "second to none" in explaining and predicting accounting methods dates from 1978 and is applicable to the profit sector.

Up to now there is no equivalent of the "agency-theory" for the non-profit sector particularly for the governmental

sector. Even Lüder's theory which will be discussed beyond does not provide an answer to the different accounting methods and practices, other than the general accounting innovations towards accrual accounting.

Only Zimmerman (JAR 1977) has attempted to apply the "agency theory" in municipal context in an exploratory way. He even tested with positive findings the agency aspect assuming that elected and appointed officials represent the *agent* whereas the voters represent the *principal*.

2.5.1.3 Critical appreciation

In the "agency theory" the focus is more or less unidimensionally on increasing/decreasing income or P/L explained by differing accounting methods.

In a governmental accounting context contrary to a business accounting context, the final P/L is not the ultimate target to be interested in. There are far more important reported issues to consider such as costs of provided services, value for money, financial soundness, intergenerational equity, ...

Therefore, the target which is merely the easily measurable P/L in the profit sector, is far more complex in the governmental sector. Thus, the accounting methods to look at are going to be more divers as well.

A possible approach might be as follows.

- 1/ One might list possible kinds of accounting outcomes such as increase or decrease in disclosure of for example off-balance financing, disclosure of only the positive performance indicators or not, increase or decrease in recording judgemental writing-offs, etc., of which the notion increased or decreased P/L is the one common with the profit sector.

- 2/ Consequently, the search for which factors explain the

differences in these envisaged accounting and reporting outcomes can start and testing can begin.

These ideas which are only in a developmental phase might somehow lead to a general theory in which the "agency theory" is a specific case for the profit sector and in which the nature of the agency relationship is redefined for governmental organisations.

A second remark which is also valid for Lüder's theory below is that the "agency theory" explains and predicts accounting methods and choices as an event, not as a process of implementation. The present study is going to respect the accounting change as a process on the move, not as an event disregarding the implementation phase.

2.5.1.4 Use in the present study

The mentioned bonus plan hypothesis is not applicable in the Flemish governmental sector. The debt/equity hypothesis will be approached by long term debt per capita and a hypothesized positive effect on the level of compliance with accounting regulations and requirements.

The size of the municipalities will be an examined variable, but not as a proxy for the political costs hypothesis.

2.5.2 Lüder's "Contingency theory"

2.5.2.1 Definition

The "Contingency theory" aims at explaining the more informative governmental accounting innovations in a certain country or jurisdiction through interactions in social, political, administrative factors.

This model in particular is developed by Lüder for state governments after observations in about ten countries. It was published⁸⁴ in 1990. After observations in Italy, Japan and Spain Lüder modified his "Contingency theory" in 1993 and presented the findings in the CIGAR 4 Conference in Saint-Gallen.

The factors can briefly be identified as:

- a. Stimuli (fiscal stress, financial scandal (e.g. by shrinking governmental financial resources), dominating doctrine
- b. External structural social variables (social culture, capital market, pressure groups)
- c. Internal structural variables consisting of
 - political variables (political culture, system and competition)
 - administrative variables (administrative culture, organisation, ...)
- d. Implementation barriers (legal system, size jurisdiction, accounting staff qualification)

All these different contextual and environmental factors are assumed to interact (affecting, reinforcing) leading to the result of the innovation proces which is a reform towards

⁸⁴ In considering this theory often referral is made to the article of Klaus Lüder: "A contingency model of governmental accounting innovations in the political-administrative environment", published in *Research in Governmental and Nonprofit Accounting* in 1992. However, this model was already published in German in 1990: Lüder, K., Hinzmann, C., Kampman, B., Otte, R. (1990), *Vergleichende Analyse öffentlicher Rechnungssysteme - Querschnittsanalyse*, Speyerer Forschungsberichte 89.

accrual accounting.

2.5.2.2 Followers

Lüder's "Contingency theory" has always had a number of followers and today it is still supported. The "Contingency theory" has become a kind of paradigm⁸⁵ around which analyses, studies and communicating accounting reforms are built up. Several researchers have attempted to apply this conceptual theory in different countries. Without being exhaustive Godfrey, Devlin & Merrouche have done so in Kenya, Tanzania and Uganda (CIGAR 1995) for state and local governments and for local governments in Algeria and Morocco (CIGAR 1997); Mussari (CIGAR 1995) in Italy for local governments and Pallot for the state New Zealand (CIGAR 1995). Even in other sectors such as health care attempts have been made to apply Lüder's theory and a reconsidering of the concept of the accounting innovations was proposed by Monsen & Näsi (CIGAR 1997). Lüder's theory is regarded as the only conceptual governmental accounting theory. Up to now there are no other underlying governmental accounting theories.

2.5.2.3 Critical appreciation

A major critique is that the "Contingency theory" has never been tested empirically and that it is even not in a testable structure.

Referred to by Pallot (CIGAR 1995, p. 9-10) Lüder⁸⁶ admits this conclusion (1994, p. 14):

"Due to its complexity, the model as a whole presumably

⁸⁵ Monsen & Näsi (CIGAR 1997, p. 8) call it "the dominating research paradigm in CIGAR".

⁸⁶ Lüder, K. (1994), The 'Contingency model' reconsidered: experiences from Italy, Japan and Spain, *Perspectives on Performance Measurement and Public Sector Auditing*, E. Buschor & K. Schedler (eds.), Berne, Paul Haupt Publishers.

does not lend itself to statistical testing. But what can and should be done to substantiate or falsify it, are case studies of special governmental accounting reform processes either in the form of 'action research' (see e.g. Hogheim⁸⁷ et al. 1992) or in the form of 'expost analyses' (see e.g. Carpenter & Feroz 1990)."

Only Allen & Sanders (FAM 1994) partly tried to quantify some of the stimuli and structural variables of the first version of Lüder's model published in 1990. Except for this attempt, there seem to be no other studies which can be interpreted as an empirical test of Lüder's theory.

Moreover, the effect of certain variables is not generally agreed upon. For example, on the size of the jurisdiction as a barrier controversial ideas and findings coexist. Supported by empirical findings some researchers argue that the larger the government, the better the adoption. Lüder and others, some of whom base themselves upon empirical results argue that the smaller the community, the easier the reform.

Another remark which is also controversial is "the lack of robustness and generalisation of its findings" (Godfrey, Devlin & Merrouche CIGAR 1995, p. 3). Surprisingly, Monsen & Näsi (CIGAR 1997, p. 9) literally think the opposite: "The contingency model has shown remarkable robustness and adaptability".

Innovations is the ultimate target in Lüder's theory, but "the process of innovation has remained mostly like a black box." (Monsen & Näsi CIGAR 1997, p. 9). Indeed Lüder's model is capturing the innovations as a situation, a kind of an event which is either reached or not, without respecting the implementation as a phase along with the consequences during that phase. There can be referred to figure 6 where Lüder

⁸⁷ Hogheim, S., Monsen, N., Olsen R.H., Olson, O. (1992), *Action research in accounting: experience in the process of redesigning an annual report*, Preprint, Bergen, The Norwegian School of Economics and Business Administration.

seems to skip the phase of conceptual framework and implementation.

2.5.2.4 Use in the present study

It is not the intention to individualise and to apply the "Contingency theory" to the Flemish municipal context. The present study does not aim at explaining the accounting reform, but aims at technically investigating the process of implementation towards the accounting outcomes. Nevertheless, some empirical findings may occur which implicitly measure items involved in the "Contingency model" such as municipal size and qualification accounting staff.

2.6 SCOPE OF THE RESEARCH

Whereas the municipal accounting reform in Belgium is regulated nationally by NARGC, the present study is limited to the municipalities of the Flemish District⁸⁸.

This limitation of the scope can be motivated as follows.

Firstly, the Flemish District has become important enough to be studied due to the constitutional changes in Belgium⁸⁹. Moreover, certain ongoing accounting reforms⁹⁰ in the public sector are going to be regulated by the Districts themselves and not by the Belgian State legislator.

Secondly, a very important reason to distinguish the research vis à vis the Districts is that the implementation rules are not the same in the three Districts. The guidelines in respect of the reporting of the annual accounts differ a lot. In the case of the Flemish District these practical regulations are elaborated by the Ministry of the Flemish Community⁹¹ or likewise.

Thirdly, the Provincial Oversight Bodies, which are going to play the main role in auditing the annual accounts, are distinct per District. These Bodies are de facto organised differently and operate in a rather autonomous way⁹². It is notable to mention that this will probably imply a different

⁸⁸ The constitutional changes in the Belgian State have created three distinct Districts (Flemish, Walloon, Brussels'), which have a number of self-regulated authorities of their own.

⁸⁹ There are indeed academic studies focusing on just a community or on a part of a country, e.g. Bouckaert & Van Reeth 1995.

⁹⁰ An example is the ongoing accounting reform in the OCMWs which are going to be regulated by District-legislation instead of national legislation.

⁹¹ Referring to the Circular Letter BA 95/2 concerning the first balance sheet as of 1st Jan. 1995; the Circular Letter BA/FB 96/3 concerning the annual accounts as of 31st Dec. 1995 and the Guidelines Ministry of Internal Affairs D. Nuttynck 1996.

⁹² Interviews with B. Struyve (Prov. East-Flanders) and R. Van Torre (Prov. West-Flanders).

context between the three Districts and even within the Districts.

Fourthly, based on a preliminary field research (Christiaens 1996a, Christiaens 1996b), the three Districts appear to differ a lot regarding the use of municipal software- and consulting support. Normally, the softwarehouses⁹³ working for Flemish municipalities do not provide services for Walloon municipalities and vice versa⁹⁴. Analogously, the same can be stated about the accounting consultants and the forms of education for the municipal accounting staff. These structural differences promote as yet a distinct study.

All these appearing structural and practical differences make it difficult to apply the actual research method in a national examination. The combination of the data of these Districts would lead to a less finely tuned picture and would make certain data and findings unuseful.

Nevertheless, a comparison and analysis of differences between the accounting adoption might be an interesting intention for further research.

A second dimension of the scope is the accounting year 1995. The year 1995 is the first definite year of adoption notwithstanding the possibility to have implemented the new accounting system starting in 1991. The present study aims at a cross-sectional approach. A longitudinal one will be possible to be conducted in the coming years.

⁹³ The softwarehouses operating for municipalities of the Flemish District are principally CEVI, Schaubroeck, CIPAL and VLABRIC.

⁹⁴ Some of the softwarehouses working for Walloon municipalities are CIGER, STESUD.

Chapter 3: Hypotheses to be answered or tested

Based on previous research and on the pretesting information (Christiaens 1996a) a number of hypotheses in harmony with the existing knowledge can be formulated. The concerned constructs and their operationalisation, which is made testable and susceptible to quantification will be discussed in the next section. The **first research question** can be hypothesized as follows.

H_{10} Flemish municipalities experience structural implementation problems in complying with accounting legislation and regulations.

An assumed reason for this is the fact that "accrual accounting" has never been a tradition in governmental context. Secondly, municipal financial accounting is almost completely copied from business accounting without being fully transferable, which implies implementation problems. Another reason could be that the new financial accounting has been added without changing or adapting the role and supremacy of the budgetary accounting system, which results in conflicts. Fourthly, there is insufficient professional guidance for the implementation. Fifthly, there is a lack of follow-up and audit, which is assumed to cause disparities and disconformity with regulations. Lastly, there is no well-defined conceptual framework built on clearly defined user needs and principles, which allows a mixture and as a result some confusion around presumed objectives of the new financial accounting may arise.

The hypothesis of the **second research question** is defined as follows:

H_{20} In the accounting practices a number of problems in respect of the compliance and cross-sectional differences occur.

This hypothesis relies also on the fact that there are no economic mechanisms, nor audit mechanisms that monitor and follow-up the implementation phase.

The third research question consists of a number of hypotheses:

H₃₀ Municipalities with at least one year of experience in implementing the new accounting system, attain a superior level of compliance.

Municipalities that have started before 1995 (e.g. 1991, 1992, 1993 or 1994) are assumed to have gathered a relevant experience and to have resolved primary accounting problems by now. Moreover, since such municipalities have chosen freely to start earlier, it is likely that they were less resistant and thus more cooperative in elaborating the accounting reform. By means of this hypothesis the effect of tradition is tested.

H₃₁ External influence (i.e. accounting and auditing relationships) positively affects the compliance level.

The construct accounting and auditing relationships is operationalised by their being associated with related parties or not and by their having called in the permanent support of professional accounting consultants or not.

Municipalities related with business-like organisations which have to apply accrual accounting are assumed to perform better in adopting the accounting reform. Similarly, municipalities guided in a rather permanent way by professional accounting consultants will show a higher level of compliance.

H₃₂ The function of a Regional Municipal Treasurer positively affects the level of compliance vis-à-vis the function of a (single) Municipal Treasurer.

The Regional Municipal Treasurer is responsible for more than one local government and is thus assumed to have an enlarged experience. Moreover, this person is less dependent on decisions of the Municipal Council since he is appointed by a higher government.

H₃₃ The professionalism of the municipal accounting staff positively affects the level of compliance.

The professionalism is operationalised by the level of education, the membership of professional institutions, the business accounting experience and the training in the new municipal accrual accounting.

H₃₄ The reliance on debt of a municipality positively affects the implementation and compliance.

The reasoning behind this hypothesis is the tendency to improve disclosure when a governmental entity copes with a higher level of debt.

H₃₅ The wealthier the municipality, the more implemented the new accounting system.

The construct wealth of the municipality is operationalised by the own revenue per capita.

H₃₆ Larger municipalities are superior in the level of compliance.

The municipal size is measured in population.

The fourth research question leads to the following hypothesis.

H₄₀ The comparability of the annual accounts is very poor.

Problems in compliance and particularly the varying approach in municipalities, the lack of a conceptual framework, problems in transferability which are dealt with individually and thus differently, different concepts of valuation rules, problems in understanding the targets of the new system and a lack of coordination by the Oversight Bodies are the main reasons to assume a poor comparability of accounting output.

Chapter 4 Definition of major concepts or constructs

There is a need for concepts and constructs in order to operationalise the variables in the research questions.

4.1 EXTENT OF COMPLIANCE

4.1.1 Objective

In this coordinating concept the operationalised elements of compliance and disclosure regarding RQ1 and RQ2 are going to be considered.

This broad concept consists of data summarisation, descriptive analysis and documentation of empirical regularities to proceed an examination of practices. It is an attempt to measure the empirical outcomes of the new municipal accounting system and its compliance with reformed accounting regulations. However, the following limitations should be taken into consideration in the present study.

Limitation 1: Financial accounting only

The budgetary accounting system, the budget conformity reports and other budgetary output will not be examined *per se*. This system and its outputs have already existed before and they are not the major part of the reform.

Limitation 2: Concentration on conformity with accounting regulations relevant to users

The reformed accounting legislation and regulations can be divided into two categories:

- * on the one hand there are the strictly legal, rather formalistic requirements which are not directly relevant to user needs (e.g. form of G/L, form of account, lay-out of the legal books, formal authorisation of certain documents, etc.);

- * on the other hand there are the compulsory regulations with an influence on the accounting output and thus on

the usefulness.

The compliance with requirements just for formalistic conformity with regulations is not considered as relevant to the user perspective and therefore it is not taken into account. What counts is the compliance with rules and requirements insofar that the accounting outputs will be influenced.

This point of view will not prevent this study to start with the conformity with the legal requirements and regulations as a point of departure, then these items will be screened using the criterion "influence on annual accounts".

The screening will not be left to the user himself by asking him, but it will take place from a "prescriber's" point of view. An important reason for this is the fact that this reform is rather young and it might be too early to ask the user for something he cannot know yet.

Limitation 3: No auditing of the annual accounts

The purpose is not to audit thoroughly the municipal financial reports as if it were for providing an (un)qualified audit-opinion. The target is the measurement of the outcome of the accounting practices regarding the merits of the reform.

Limitation 4: Allowed different accounting practices

Although in accordance with law and regulations cross-sectional differences between municipalities may occur. These differences can be caused by optional valuation rules foreseen by NARGC or by issues which are not clearly regulated and which are interpreted individually by the municipal accounting staff. Such differences which will affect the annual accounts are not included here, but are considered in the concept of comparability.

Limitation 5: Occurring differences with business accounting principles or practices

It is likely that in the empirical investigation differences with business accounting principles (GAAP) and practices will occur. The search for such differences is not the research target *per se*, but if they do appear, they will be reported, which could be an interesting contribution.

4.1.2 Approach

The series of elements needed to operationalise the extent of compliance are inspired by the framework of assertions as used in an audit-environment.

It can be noticed that there are indeed a number of methodological similarities between an audit approach and the approach of testing the compliance of municipalities with accounting regulations. Therefore, the technical know-how from the audit-discipline can be useful in this accounting practice study.

Referring to the professional literature concerning the assertions (Ernst & Young 1990(*), Section 3, p. 18; Van de Ven 1981(/), p. 5; Arens & Loebbecke 1988(-), p. 147), the possible determinants of the compliance belong to following groups:

*/-I Completeness: all transactions that should be recorded are recorded; all assets, liabilities, rights and commitments are disclosed

*/-II Realness (existence, validity): all recorded items exist, no fictitious items nor duplicates are recorded

/-III Ownership: the disclosed assets are the organisation's property; assets are not pledged as collateral

/*-IV Properly valued: monetary amounts are correctly assigned to transactions according to the prescribed rules

/*-V Reflected in proper accounting period (cut-off):
matching, realisation

*-VI Correctly classified: items and transactions are coded to
the proper G/L account

*-VII Mechanical accuracy: accumulations and calculations are
done correctly

/-VIII Disclosure: completely and correctly

Basically, these assertions are the points of departure for
defining the determinants of the compliance in terms of RQ1
and RQ2. The determinants will be extended with 3 items (i.e.
timeliness of the reporting, formalistic requirements and
adequacy and usefulness) belonging to the **disclosure** but
handled separately due to their specific importance.

4.1.3 Description of the elements

4.1.3.1 Timeliness (art. 78 RD 2nd Aug. 1990)

4.1.3.1.1 Motivation of the importance

The importance of timely reporting is stressed by several authors. Some examples are cited below:

"Many expressed frustration about the lack of timeliness in government reports ..." (Canadian States - CICA 1980a, p. 31);

"Financial reports issued long after the year end are of historical interest only. The usefulness of information in making decisions and judgments diminishes as time elapses." (Canadian Local Governments - CICA 1985 p. 58);

"If the annual accounts are disclosed years after the financial year, it can no longer function as a management tool (Dutch municipalities - Faber & de Jong 1988, p. 10)

"The code emphasises the timeliness of information and recommends that the report should be published as soon as possible after the year end and preferably by the end of September" (Rutherford 1983, p. 161)

4.1.3.1.2 Definition

In defining timeliness Dwyer & Wilson (JAPP 1989, p. 41) focused on the date on which the annual accounts were available. They defined the total reporting time lag as the time elapsing between balance date and the date at which the annual reports were mailed to the users.

Coy, Tower & Dixon (FAM 1994, p. 253) considered timeliness from two angles:

(a) time elapsing in number of weeks between balance date and date when reports were tabled in Parliament;

(b) time elapsing in number of weeks between balance date and date when reports were made available for public at

large.

A third study also emphasized the date of availability defining the timeliness as the time lag between the deadline of reporting which was 31st October 19N1 and the date at which the reports were received by the Central Bureau of Statistics in The Netherlands (Volmer 1992, p. 24). The unity of measuring was a period of two months from the deadline up until 28 months after balance date.

The same deadline (i.e. 31st October 19N1) was taken by Faber & de Jong, (1988, p. 19) but instead of taking the date of effective availability they decided to select the date of the provisionary enactment by the Municipal Council. Indeed, they wanted to measure the date of readiness from the point of view of the municipality in spite of the fact that the date of ability to consult the report might be later.

This point of view is taken over since this study actually examines the compliance with accounting regulations and the accounting task ends with the enactment by the Municipal Council.

According to art. 78 NARGC the Municipal Treasurer has to present officially the annual accounts (budgetary account, balance sheet, P/L account and Notes) to Mayor and Aldermen before 1st March of the year after the financial year.

The further procedure is as follows. An example for one of the experienced municipalities for the financial year 1994 is added between brackets and underlined):

- * Date 1: before 1st March 19N1: the Municipal Treasurer has to sign and send the annual reports to the Mayor and Aldermen (art. 78 NARGC) (13th March 1995);

- * Date 2: within the first trimester 19N1: Verification and Approval by the Mayor and Aldermen (13th March 1995);

- * Date 3: sending out to Municipal Councillors in a period of at least 7 days (art. 96 NGW);
- * Date 4: within the first trimester 19N1: Reception and Enactment⁹⁵ by the Municipal Council (art. 240, par. 1 NGW) (4th April 1995);
- * Date 5: Receipt by the Provincial Governor (2nd May 1995);
- * Date 6: Approval by the Governor (22th February 1996);

At date 4 the annual reports have to be advertised during 10 days on the official notice board in the Town Hall (art. 242 NGW).

Date 4 can be regarded as the publishing date or at least as the date at which the annual accounts were finished in spite of the 10 days of official notice in Town Hall which may be deferred for 1 month at the most.

Therefore the timeliness is defined as the time lag in days between date 4 (i.e. 31st March 19N1) and the date of Enactment of the annual reports by the Municipal Council.

The data will be derived from the Questionnaire I-1 as well as from the annual reports themselves.

⁹⁵ In the Netherlands this date 4 at which a kind of provisional Enactment by the Municipal Council takes place is at the latest 31st October 19N1 (Faber & de Jong 1988). This date is 10-3 = 7 months later than the Belgian deadline.

4.1.3.2 Completeness

4.1.3.2.1 Definition - elaboration

Completeness can be defined as:

Have all (also donated) assets, liabilities, revenues and costs been recorded in the annual accounts?

The approach of this study starts of a double level. In a first general stage the municipalities were asked to filling in the items not recorded in their first balance sheet by means of Question II-3 of the questionnaire (see Chapter 8: Investigation questions).

In a second stage the approach consisted of a more detailed observing, analysing and critical evaluation based on the disclosure of balance sheet items or not. Using this second stage will help to resolve the typical validity threats coming with the first stage such as incomplete answers, respondents who do not like to admit certain weaknesses.

The next parts describe the different concepts to test the completeness.

4.1.3.2.2 Assets

The main question is: Have all (also donated) assets been inventoried, valued and disclosed (art. 17, par. 2, RD 2nd Aug. 1990), irrespective of their method of financing?

Since it is not possible to audit all municipalities, the focus will be limited to the following major balance sheet items. There is of course the assumption that these items are applicable to all municipalities:

a) Fixed assets (intangible and tangible): There are a number

of natures which presumably⁹⁶ every municipality should have recorded:

- 205 Land of parks, gardens, cimetaries, sport parks and recreation areas
- 211 Land of buildings
- 212 Office buildings
- 213 School buildings
- 214 Industrial and exploitation buildings
- 215 Buildings for sports, culture and religion
- 231 Land of the roads
- 235 Sewers
- 236 Waterpipes
- 237 Other networks
- 238 Public lighting
- 241 Land of constructions
- 261 Land of watercourses
- 340 Art patrimony

b) Stocks (art. 23, RD 2nd Aug. 1990): this item seems to be regulated rather ambiguously by the legislator. In the form of the annual accounts (MD 23th Sept. 1991 modified by MD 10th Jan. 1996) as well as in the Chart of Accounts (MD 25th March 1994) the legislator asks for the disclosure of stocks.

On the other hand art. 23, RD 2nd Aug. 1990 mentions the possibility of installing a stock management system in the municipality for which the rules still have to be defined by the Ministry of Internal Affairs.

This last statement could be interpreted as if the municipalities were not (yet) obliged to record the stocks.

However, disclosing the stocks is an issue of adopting accrual accounting. Moreover, stock accounting and consequent management control is one of the aims of the reform (Loots & Michiels 1996, p. 14). Therefore, this study is examining the outcomes of stock disclosure.

c) Are all Doubtful debtors disclosed?

Doubtful debtors have to be recorded and disclosed in the G/L

⁹⁶ A few items such as 213 School buildings, 214 Industrial buildings and 215 Buildings for sports and culture are perhaps not existent in some smaller municipalities. This possible remark will be further taken into account in the findings and interpretations.

accounts 40700 Doubtful debtors or 41700 Other doubtful debtors according to the Chart of Accounts (MD 25th March 1994).

Although the relevance of this item can be questioned⁹⁷, the disclosure of doubtful debtors in the trial balance is part of the obligatory accounting adoption.

There is of course the assumption that every municipality encounters amounts receivable which have become doubtful to collect but which are still outstanding on 31st December 1995. This assumption is realistic since the debtors are at least the citizens who have to pay their yearly municipal taxes and the municipality may not preclude bad-payers from providing municipal services as could be the case in business enterprises avoiding non-paying. Thus, it is likely that a municipality systematically encounters doubtful debtors.

Moreover, an attempt to check this assumption can be worked out looking at the G/L account 67111 *Exceptional costs Ordinary Service*. If this account discloses a balance, then it is quite obvious that the municipality must have encountered doubtful debtors. This information is to be found in the trial balance attached to the annual accounts.

d) Are all debtors taxes accounted for and disclosed? (art. 46, par. 2, RD 2nd Aug. 1990)

Normally this balance sheet item (VII.B.1) should be different from zero (Verbeken 1995, p. 103; Leroy 1995, p. 573). As a matter of fact the municipalities are advised not to lose sight of this item when drawing up the assets and liabilities (Guidelines Nuttynck 1996, p. 2).

⁹⁷ See Chapter 12, 12.1 SUPREMACY OF THE TRADITIONAL BUDGETARY ACCOUNTING.

4.1.3.2.3 Liabilities

The question here is: Have all liabilities been inventoried, valued and disclosed? (art. 17, par. 3, RD 2nd Aug. 1990)

Since it is not possible to audit all municipalities, the focus will be on provisions for risks and charges, trade and other creditors assuming that these items are applicable to all municipalities.

a) Provisions for pensions: the importance of disclosed pension provisions and comments on pension plans in the Notes is stressed in several major standards such as CICA 1985, p. 70; GASB 1986.

Contrary to private business enterprises municipalities may autonomously insure the pensions for their Mayor and Aldermen as well as for their personnel.

In order to become aware of and to get an overview of the actual pension financing systems, municipalities are asked to fill in Question II-1 of the questionnaire. With respect to this information the according accounts in the trial balance together with the Notes are examined.

Internally⁹⁸, there could be different pension plans such as for example in certain Canadian States (CICA 1980a, p. 112-113):

- straight cash ("pay as you go");
- contributions registered into a liability and gradually drawn down as the pension is paid out;
- separate fund with actuarially computed contributions;
- ...

It is equally possible that municipalities have ceded the

⁹⁸ The term "internally" implies the following: the pension obligations are on behalf of the municipality in spite of the fact that some municipalities could agree to set up a kind of a mutual fund financed by municipal contributions but with an ultimate responsibility for the municipality if the reserves of this fund would be insufficient. If the municipality can completely cede the pension obligations (i.e. without any ultimate responsibility), then the term "externally" is preferred.

pension obligations and therefore have made treaties with external professional parties, such as insurance companies, an autonomous pension fund, RSZPPO.

In the cases of an internal pension financing system the question arises which pension plan is applied and to what extent all the corresponding provisions are disclosed?

b) Have all Other provisions for risks and charges been disclosed?

Provisions other than for pensions contain several items (e.g. provisions for claims and litigations, provisions for major repairs and maintenance, provisions for other kinds of obligations).

The importance of this last group is emphasized by considering the deficits in OCMW-hospitals. Nearly all Flemish OCMWs⁹⁹ encounter a deficit which has to be financed by the related municipalities. A number of these OCMWs have a hospital at their disposal. Particularly in OCMW-hospitals it takes approximately a few years until the exact deficit is defined and agreed upon due to the intervenience and certain rigorous financing procedures of the Ministry of Health Care.

Therefore, attempting to record all assets and liabilities in a complete way, the occurring deficits should be estimated and accounted for as provisions in the municipality. As a matter of fact, according to specific accounting legislation¹⁰⁰, hospitals have to record the municipal financial support¹⁰¹ as debtors at the time at which the deficit is incurring.

Question II-2 of the questionnaire asks for information about

⁹⁹ Except for two negligible, very small municipalities (Lo-Reninge and Herstappe), Ministerie Vlaamse Gemeenschap 1994, p. 160-167.

¹⁰⁰ The Royal Decree 14th December 1987 regulating hospital accounting defines the accounts 2913 Debtors: Deficit at the expense of the municipality (amounts falling due after more than one year) and analogously 413 ... within one year).

¹⁰¹ This obligatory support is regulated by art. 109-110 of the Coordinated Health Care Legislation in casu RD 7th August 1987.

the relationship with the OCMW-hospital if existent and about the accounting practice regarding OCMW-hospital deficits.

4.1.3.2.4 Profit and loss

Have all revenues and costs been valued, recorded and disclosed? (art. 18 RD 2nd Aug. 1990)

The approach will be limited to the following P/L items:

a) Salaries of the educational staff of the municipality financed by a higher level of government: have all these salaries been disclosed as costs and as revenues in the P/L account (art. 72 RD 2nd Aug. 1990)?

These educational salaries are paid by the Federal Government on behalf of the municipality. The existence of this obligatory journal entry and its correctness (i.e. its being equal) can be checked by testing the particular accounts: 62011 Salaries educational staff at the expense of federal government and 73401 Subsidies higher government for the salaries educational staff (Martens, Umans & Blomme 1992, p. V-10, 11).

All¹⁰² Flemish municipalities have used the function education in their functional budget, this suggests that they all provide education services, but they need not all be in the situation of receiving subsidies for educational staff.

b) Have all the immovable fixed assets been yearly revaluated according to the correct rule? (art. 21 RD 2nd Aug. 1990)

This question can be answered by recalculating the revaluation per item and by comparing with the recorded revaluation on the G/L account 76120 Yearly revaluation on immovable fixed assets.

¹⁰² Except for the smallest Flemish municipality Herstappe, Ministerie Vlaamse Gemeenschap 1994, p. 119-127.

4.1.3.3 Existence, realness

Recorded items should be real, not fictitious and there should be no duplicates either. This assertion is difficult to operationalise. There can be referred to the conceptual features of the recognition of public goods and to the problems in double-counting of certain assets such roads and accessories of roads, etc. as revealed in the pretesting phase (Christiaens 1996a).

4.1.3.4 Ownership (entity)

A municipality can establish (art. 5 MD 30th Oct. 1990) one or more "ordinary" municipal enterprises of an industrial and commercial kind according to art. 261, par. 1 NGW:

- fixed assets assigned to these enterprises (e.g. Department water distribution) have to be included in the physical inventory of the municipality, but should not be accounted for in the accounting system of the municipality itself.
- each year the net profit has to be transferred in cash to the municipality.

Question I-2 tries to explore the different relationships with "ordinary" municipal enterprises to become aware of the importance and the possible problems regarding the assertion ownership.

The relationships with municipal NFPOs (e.g. swimming pool, sport centre, ...), which possess legal personality are less emphasized in the study since the risks of overlap of property are less important.

4.1.3.5 Valuation

a) Starting value: according to art. 1 MD 30th Oct. 1990 modified by MD 1st Feb. 1994) a number of well-defined balance sheet items may not be valued in the first balance sheet irrespective of their importance or value. Starting from the financial year 1995 such items have to be valued when they are acquired or purchased in 1995 at their acquisition value.

The question is whether municipalities have respected this valuation rule or not. The kinds of assets not to be valued in the first balance sheet are the following natures:

- 141 Intangible fixed assets: Plans of urbanisation
- 142 Intangible fixed assets: Abandoned plans and studies
- 233 Upper side road
- 302 Street furniture and traffic signs
- 341 Life-stock
- 349 Other movable investments

The municipalities which have started before 1995 (i.e. experienced municipalities) are supposed to be in compliance with regulations. The assumption is that they have started on different dates before 1995 and the regulations concerning the non-recording of the mentioned items were still in a development stage. Moreover, some of the experienced municipalities were trying to record the municipal properties as completely as possible whereas later on the rule is changed.

The possible impact of the experienced municipalities in having recorded those items is integrated in the findings.

b) Valuation rules fixed assets and art patrimony: the applied valuation rules will be compared with the legally prescribed rules for most of the fixed assets.

4.1.3.6 Cut-off

a) Creditors (VIII'B' 44): Have all creditors been recorded according to the inherent accounting regulations?

In other words: are the accounts 440 *Trade creditors*, 442 *Invoices to be received*, 447 *Invoices to be charged* properly recorded or are these accounts recorded only to the extent that they are paid during a certain period (authorised) subsequent to the year end? (The occurrence of this last method is described in CICA 1980a p.118; "if paid before 30th April").

Question II-6 provides information as to the accounting practice regarding the cut-off.

b) How are the prepayments of dividends recognised?

Prepayments of dividends coming from intermunicipal organisations or other enterprises can be booked as a profit in the year of receiving the prepayment or it can be deferred to the year of realising the dividend, mostly the next year. Whether the deferral is accounted for by means of a debt-account or by means of an accrual and deferral account does not matter very much here as long as it is not disclosed as a profit. The data are provided by question II-8.

It should be noted that some intermunicipal organisations¹⁰³ periodically pay a kind of fee to the municipality, often with respect to the profits of the organisation. The background of this kind of payments is the fact that the organisation uses certain municipal properties. This payment of a certain fee should not be confounded with dividends, which are processed in the appropriation account.

¹⁰³ This conclusion is based on the interview with a Municipal Treasurer providing the example of Interelectra which is an intermunicipal organisation specialised in the distribution of electricity.

c) Accruals and deferrals

Have all accrued and deferred charges and revenues been recorded and disclosed on assets-, liabilities-side? (art. 24, RD 2nd Aug. 1990)

Although art. 24 only regulates deferrals and not accruals, the empirical examination will also pay attention to the accruals as motivated in Chapter 12, 12.1.8 ACCRUALS AND DEFERRALS.

The accrual/deferral account 49600 *Payments to identify* in particular is interesting to examine. According to Martens, Umans & Blomme (1992, p. V-61); Loots & Michiels (1996, p. 15) this account has to contain at least the salaries of the appointed officials of January 1996 paid in advance in December 1995 unless the payment took place in January 1996. Question II-7 is intended to find out whether this was done and to investigate the accounting practices.

Regarding the accrued charges one could imagine the necessity of this account in order to record accrued interests on loans (realised in 1995, but payable in 1996) and the redemption¹⁰⁴ of loans. However, this problem was avoided systematically by asking the bank of the municipalities (i.e. Gemeentekrediet) to settle all accrued charges as of 31st December 1995 by means of a bank statement early in 1996. Therefore, recorded interests and redemptions need not to be adjusted by accruals and deferrals.

However, there are still some loans and leasings with other financial institutions where the accruals might not be settled that easily. These last ones are not further dealt with in the empirical examination since they are less important.

¹⁰⁴ According to GAAP redemptions of loans should not be recorded in the P/L account, but in light of NARGC redemptions are treated as if they were costs as well. Afterwards they are adjusted by means of an account of another kind.

Finally, another interesting issue are the suspense accounts, which will be examined empirically.

4.1.3.7 Classification

a) Sign-test assets-side: All disclosed assets are expected to be accompanied by a positive sign, except for IX.C 56/58 *Payments in progress* which should always have a negative sign and except for cash at bank and in hand, which may both be either.

An opposite sign of an amount disclosed in the annual accounts can be caused by a mistake in disclosure; it can also imply journal entry errors and misclassifications; it can even expose an infringement on municipal law or legislation in general (Christiaens 1996d, p. 195).

b) Sign-test Liabilities-side: apart from I'10 *Capital* and III'A'B'C' 13 *Accumulated results* for which both signs can occur, all liabilities are expected to incorporate a positive sign.

c) Sign-test P/L account: principally all items should be accompanied by a positive sign.

d) Compensation

Art. 1, 6° NARGC defines the accounting system's journal emphasizing that all transactions are registered chronologically and without compensation. The interdiction to compensate is also stressed by Martens, Umans & Blomme (1992, p. I-66) as one of the accounting principles applicable for municipalities. Apart from the possibly wrong signs as mentioned above compensation is examined by observing the disclosure in the annual accounts combined with information from the trial balance.

e) Have the employer's social contributions been recorded on the correct account?

According to the *Chart of Accounts*¹⁰⁵ the employer's

¹⁰⁵ MD 30th October 1990, modified by MD 25th March 1994, modified by MD 29th April 1996.

contributions to RSZPPO for pensions have to be recorded on the G/L account 62401 *Employer's contributions to the fund for municipal pensions*. It is interesting to study empirically whether this classification has been complied with.

4.1.3.8 Mechanical accuracy

The term mechanical accuracy concerns the coherence, consistency and logical relationships among disclosed items of the annual accounts.

This technical subject is interesting from the point of view of the compliance with regulations as well as from the point of view of the user who may be faced with interpretation problems due to inaccuracies.

It is likely that errors in the coherence reflect at least shortcomings in disclosure but this type of error can also be caused by the bookkeeping.

The existing literature reflects some formulas and necessary relationships. Professional accounting consultants have a series of possible checks at their disposal (Verheyden 1996; interview M. Maebe Euraccounts).

The mechanical accuracy will be tested by concentrating on those tests which can be generalised over all the municipalities. The reconciliation-tests which are applicable over more than one financial year are excluded since most of the municipalities only have accounting figures for 1995.

The data for testing mechanical accuracy are derived from the annual accounts, particularly from the trial balance.

a) Reconciliation of the results: the liabilities-side of the balance sheet should be in correspondance with the appropriation accounts of the P/L account as indicated in following formula:

+ XIV.A. 69201 Exploitation profit to be appropriated
 + XIV.B. 69202 Extraordinary profit to be appropriated
 - XIV'A' 79201 Exploitation loss to be appropriated
 - XIV'B' 79202 Extraordinary loss to be appropriated
 = III'C' 1303 Accumulated results of the current year

b) Reconciliation of the reserves: similarly as for the results the movements of the reserves should be in line with

the according accounts of the P/L account:

part "Ordinary reserves"

IV'A' 14104 Ordinary reserve fund t-1
 + IX.A. 68504 Appropriation to ordinary reserves
 - IX'A' 78504 Transfer from ordinary reserves
 = IV'A' 14104 Ordinary reserve fund t

part "Extraordinary reserves"

IV'B' 14105 Extraordinary reserve fund t-1
 + IX.A. 68505 Appropriation Ordinary service to extraordinary reserves
 + IX.B. 68605 Appropriation Extraordinary service to extraordinary reserves
 - IX'B' 78605 Transfer from extraordinary reserves
 = IV'B' 14105 Extraordinary reserve fund t

c) Investment subsidies, donations and legacies: if a municipality obtains investment subsidies, the capital amount has to be spread over the number of related years by amortising the matched part each year. It is clear that the sum of cumulated amortisations may not exceed the capital amount (Verheyden 1996, Chapter 2, p. 37):

15117 V'A' Cumulated amortisations investment subsidies, donations and legacies in capital of private enterprises

<=

15111 V'A' Investment subsidies, donations and legacies in capital of private enterprises

Analogously,

15137 <= 15131 Donations and legacies in the form of patrimonial goods of private enterprises
 15217 <= 15211 Investment subsidies, donations and legacies in capital of households, NFPO's and other organisations
 15237 <= 15231 Donations and legacies in the form of patrimonial goods of households, NFPO's and other organisations
 15417 <= 15411 Investment subsidies in capital of higher governments
 15427 <= 15421 Investment subsidies in the form of repayment of redemption of loans by higher governments
 15437 <= 15431 Investment subsidies in the form of capital goods of higher governments
 15617 <= 15611 Investment subsidies in capital of other governmental institutions
 15637 <= 15631 Investment subsidies in the form of capital goods of other governmental institutions

d) Cumulated amortisations of investment subsidies: the sum of the cumulated amortisations at the end of the year over the different items of investment subsidies have to exceed the current amortisation in the P/L account (Verheyden 1996, Chapter 2, p. 37):

Sum 15xx7 Cumulated amortisations investment subsidies
 $\geq$
 76780 Amortisation of received investment subsidies,
 donations and legacies

e) Subsidies in capital promised by a higher government or by other governments: these disclosed, promised subsidies may not exceed the (obtained) investment subsidies in capital of a higher government or other governmental institutions (Verheyden 1996, Chapter 2, p. 38).

27041 Subsidies in capital promised by a higher government

$\leq$
 15411 Investment subsidies in capital of higher governments

and

27061 Subsidies in capital promised by other governmental institutions

$\leq$
 15611 Investment subsidies in capital of other governmental institutions

f) Redemption of loans: due to the obligatory recording of the redemption of loans in the P/L account, the legislator has decided to impose an adjustment journal entry influencing another part of the P/L account. It is obvious that these two amounts should be identical.

I.E. 64 Current costs: Redemptions of loans

=
 IV'C' 765 Adjustment of the accounts concerning the redemptions of loans

g) Redemption loans written out: as in the previous equation, the similar amounts for loans written out should also be identical as disclosed in the P/L account.

IV.D. 665 Adjustment of the accounts concerning the repayable redemptions of loans

=
I'D' 74 Redemptions of loans receivable

h) Necessary similarity

As prescribed by NARGC the balance of the invoices in suspense of being charged which are credited on the liabilities-side should equal the balance of the according accruals/deferrals on the assets-side. Therefore, the accounts 49200 Invoices in suspense for charging and 44700 Invoices to be charged should disclose balances of identical amounts.

i) Necessary relationship: IV.A. Promised subsidies receivable 270/274 >= VII'B' Loans at the expense of a higher government 1714. The former should always exceed the latter.

The IBR course covering municipal accounting mentions that these two items should be of identical value (Loots & Michiels, 1996). However, after investigating this question, there appears to be a disparity because legitimate exceptions are possible. For example¹⁰⁶, if loans are agreed without the backing-up of a higher government, then the asset item is higher than the liability-item. The opposite is never possible so that it is a one-way relationship.

j) Necessary relationship: IV.B. Admitted loans 275 >= VII'C' Loans agreed by third parties 172

Similar remark as above. (Loots & Michiels 1996)

¹⁰⁶ Mainly, based on interviewing M. Maëbe, Euraccounts.

4.1.3.9 Disclosure

a) Have the valuation rules been included and disclosed in the Notes? (Model 14, 1/, MD 23th Sept. 1991)

Model 14 1/ imposes in general terms the disclosure of the valuation rules as applied by the municipality. The definition is as follows:

"All principles and methods applied by the municipality in order to determine the value of its assets, liabilities, rights and commitments."

No further comments are provided as to how to interpret and implement this obligation.

One could question the obligatory disclosing of the valuation rules by stating that almost everything has already been settled and regulated by NARGC; even the depreciation rates are determined. Thus, disclosing the valuation rules would not be relevant nor informative. However, the application of the rules is not guaranteed to be done according to the formalistic requirements and there remain a lot of creative accounting possibilities. For example,

- * expressing that a building was acquired in 1980 instead of in 1950 results in a complete different view;
- * attributing a unit value of 10 BEF/m² to the land of parks leads to another value then attributing them a unit value of 500 BEF/m²;
- * deciding that a capital asset is still in progress prevents the depreciation of that asset, etc.

Therefore, the need for a correct disclosure of the actually applied valuation rules remains important and should not be trivialized.

Despite an apparent lack of comment and guidelines the conformity of the valuation rules with the intentions of the reform can be covered by a double approach: qualitative - quantitative.

a.1) Qualitative approach valuation rules

Based on a preliminary study (Christiaens 1997, p. 32) the valuation rules can be divided according to 6 topics:

- 1) Valuation: this group contains comments on the applied rule and the method of valuation; examples of such rules are: acquisition value, insurance value, construction value, etc.
- 2) Revaluation: this includes a description of the method of revaluation and a calculation of the index rates regarding real estate (i.e. index Opc and index ABEX).
- 3) Depreciation: in this group the lifetimes or rates of depreciation for the fixed assets are defined¹⁰⁷.
- 4) Amortisation: this group includes a description of the method of allocating subsidies over several accounting periods.
- 5) Other: this group is miscellaneous and consists of several other items such as the valuation of provisions for risks and charges, the valuation of fixed assets in progress, etc.
- 6) Detailed per item: this means that the municipality is disclosing a detailed overview of the valuation methods per item of the balance sheet and the P/L account.

This approach of observing certain groups of valuation rules was also worked out by Faber & de Jong 1988, p. 29 for Dutch municipalities.

It will be interesting to examine the empirical outcomes and the possible disparities among the municipalities regarding research question 2.

¹⁰⁷ For most of the fixed assets the lifetimes are legally defined, but for extraordinary maintenance and repairs which can be activated and depreciated, lifetime is principally optional and has to be defined by the municipality itself.

a.2) Quantitative approach valuation rules

An additional approach is to capture the disclosed valuation rules by quantifying their volume in terms of length. In order to measure the extent of the rather textual information¹⁰⁸, Robbins & Austin (JAR 1986, p. 416) scientifically motivated and used the number of words in the disclosure. They defined gradually 5 ranges of numbers of words with a corresponding score and a max. score of 100% if over 60 words. Ingram & DeJong (JAPP 1987, p. 255-256) took over a number of practices such as "the disclosed basic accounting policies" from Robbins & Austin but only on a dichotomous basis. Volmer's approach to measure his *disclosure index* was in many respects based on the length in categories of numbers of pages (Volmer 1992, p. 35-36).

With respect to the research questions RQ1 and RQ2 both approaches are intended to be worked out. Concerning the quantitative approach the valuation rules are measured in quarters of pages instead of in numbers of words.

b) Details, comments and movements of balance sheet items

According to *Model 14, 2/ MD 23th Sept. 1991* in general terms details, comments and movements of balance sheet items should be included in the Notes. A rather ambiguous and deficient expression in a very short paragraph of *Model 14, 2/* runs as follows: "of certain balance sheet items". It is not made clear to what extent which items should be covered.

¹⁰⁸ Examples (Robbins & Austin JAR 1986, p. 414-415) of such information in the style of valuation rules were:

- the description of accounting and funding policies for employee pensions plans;
- the description of the basis of accounting for the various funds, ...

b.1) Fixed assets movements schedule

As commented in the regulations (*Circular Letter BA/FB 96/3 1.1*) the fixed assets movements schedule as part of the Notes has to be detailed per nature and has to disclose at least:

Net book value 1st Jan. 1995	...
Movements	
- Acquisitions	...
- Sales	...
- Transfers from one heading to another	...
End of the year activities	
- Revaluation	...
- Depreciation	...
Net book value 31st Dec. 1995	...

b.2) Adjustments of the initial capital (*Circular Letter BA/FB 96/3 1.2; Model 14, 4/ MD 23th Sept. 1991; Guidelines Nuttynck 1996, 2.h*)

Occasional modifications of the initial capital as of 1st January 1995 have to be described in detail in the Notes as well as their influence on the relevant balance sheet items. The *Circular Letter* mentions that during 1995 a number of municipalities have modified their capital which was drawn up as of 1st Jan. 1995 or earlier.

b.3) Details and statements of the loans (*Circular Letter BA/FB 96/3 1.3*)

The *Circular Letter* asks for an included copy showing the balances of the following G/L accounts:

- * 17101, 17141, 17151, 17211, 17421, 17501 an 17503 (i.e. different sorts of outstanding capital)
- * 42516, 43513 and 43514 (i.e. different sorts of redemptions payable and receivable)
- * 42514, 43511 and 43512 (i.e. different sorts of

redemptions payable and receivable)

* 64103, 64143, 64213, 64303, and 64423 (i.e. different sorts of redemptions charged in P/L)

Moreover, for the loans with Gemeentekrediet the "Control table with appendices" and the "Summary table revealing the redemptions with expiry date 31st Dec. 1995" have to be disclosed as well.

b.4) Investments (Circular Letter BA/FB 96/3 1.4)

According to the Circular Letter BA/FB 96/3 the accounts 28211 Investments in governmental enterprises and 28212 Called up share capital not paid in governmental enterprises have to contain the following details:

- name of the institution or enterprise;
- number of shares;
- initial value;
- not called up amount;
- amount paid and/or charged.

There is the risk that municipalities fail to disclose the not called up amount, thus disabling comparisons between municipalities. Furthermore, if there is a lack of disclosing the number of shares or the unit price per share, then a unit value cannot be deducted either. Hence, the comparison between municipalities is not possible though the investments seem to be disclosed fairly accurately.

b.5) Details accruals and deferrals (Circular Letter BA/FB 96/3 1.7)

The Circular Letter BA/FB 96/3 does not describe this requirement further on, but the fact that details are asked for implies that an explanation of contents is expected through the inclusion of the various constituent elements.

b.6) Have details, comments and movements regarding the following items been disclosed? (Model 14, 2/ MD 23th Sept. 1991)

- * III. 25 Agreed investment subsidies and IV. 27 Subsidy agreements and agreed loans;
- * VII. Amounts receivable within one year;
- * II' Capitalised results; III' P/L brought forward and IV' Reserves;
- * V' Granted investment subsidies;
- * VIII' Creditors, amounts falling due within one year and IX' Third parties

c) Details, comments and movements of P/L account items

According to Model 14, 2/ MD 23th September 1991 in general terms details, comments and movements of P/L account items should be included in the Notes. The same ambiguity as regarding the balance sheet above can be repeated.

The following topic is additionally imposed by the Circular Letter; the other 2 topics generally ressort under Model 14 2/.

c.1) Capital gains/loss on disposal of fixed assets (Circular Letter BA/FB 96/3 1.6).

Regarding the account 67241 Capital loss on disposal of fixed assets the following details have to be provided in the Notes:

- number of the individualised account (subsidiary ledger) of the fixed asset which is disposed off;
- amount of the disposed book value;
- amount to be received;
- the loss on this transaction.

The account 77241 Capital gains on disposal of fixed assets has to be similarly detailed.

c.2) Have details, comments and movements regarding the P/L account: revenues and costs been disclosed? (Model 14, 2/ MD 23th Sept. 1991)

d) Has the Trial balance been disclosed? (MD 23th Sept. 1991 modified by MD 10th Jan. 1996; Circular Letter BA/FB 96/3 1.7)

e) Have the Contingencies (rights, commitments, guarantees) been disclosed? (Model 14, 3/ MD 23th Sept. 1991)

f) Have the figures of previous year been disclosed in the balance sheet next to the figures of current year? (MD 23th Sept. 1991 modified by MD 10th Jan. 1996).

The figures of the previous year are those of the first balance sheet as of 1st January 1995. For the experienced municipalities these figures are given the title: "31st December 1994", which comes down to the same.

The disclosure of the figures of the previous year is very important¹⁰⁹ for the use of the annual accounts.

¹⁰⁹ For an example of a motivation see CICA 1985, p. 68: "Users of financial statements should be able to reconcile equity figures on the balance sheet with the figures of previous year."

4.1.3.10 Formalistic disclosure requirements

Due to their governmental features, the high level of regulations and other Oversight aspects, municipalities have to comply with a lot of formalistic requirements attached to the annual accounts.

a) Has the Statement 173 X of the Tax Administration been included in the Notes? (Circular Letter BA/FB 96/3, 1.7)

This official statement covers an overview of the taxes providing resources for the municipality. It is edited by the Administration of Direct Taxes.

b) Have the Statements of the Cadastral Revenues¹¹⁰ on 1st January 1993 and on 1st January 1994 been included in the Notes? (Circular Letter BA/FB 96/3, 1.7) These statements are provided by the Administration of the Cadaster.

c) Has the Statement of deferred budgets and appropriations (Form T) (Model 11) been included in the Notes or been attached to the budgetary account? (art. 75, par. 2, 1° NARGC; MD 23th Sept. 1991; Circular Letter BA/FB 96/3, 2.; Guidelines Nuttynck 1996, p. 6)

Form T is a rather complex administrative document regulated by strict procedures. The aim is to defer certain budgets to the next financial year under certain conditions.

d) Has the Statement of decreed claims receivable been included in the Notes? (art. 75, par. 2, 2° NARGC; Circular Letter BA/FB 96/3, 2.; Guidelines Nuttynck 1996, p. 6)

This statement is an official listing of all amounts receivable as of 31st December which were decreed according to the legal procedures.

¹¹⁰ Cadastral Revenues is the average normal net income over one year of immovable patrimony and certain machinery (art. 471 to 486 Law of Income Tax).

e) Has the Synthetic balance of general accounts (Model 15A) been included in the Notes? (MD 23th Sept. 1991 modified by MD 10th January 1996)

In this official statement the balances of the main categories¹¹¹ of G/L accounts are summarised on the balance sheet date.

f) Have the Detailed cash statements (Model 15BC) been included in the Notes? (MD 23th Sept. 1991 modified by MD 10th Jan. 1996; Circular Letter BA/FB 96/3, 1.5)

The official statement Model 15BC contains and justifies all balances of the accounts "Cash at bank and in hand". In addition, all individual subledger balances are disclosed in this statement.

g) Has the Synthetic and control table (Model 15D) been included in the Notes? (MD 23th Sept. 1991 modified by MD 10th Jan. 1996)

In this official table the balances of all the different subledgers are reconciled with the G/L.

h) Has the Certification by Municipal Treasurer art. 39, par. 6 NARGC (Model 15E) been included in the Notes? (MD 23th Sept. 1991 modified by MD 10th Jan. 1996)

By means of this official statement the Municipal treasurer firstly certifies that all the balances of all the accounts are justified by the correct documents and pieces of evidence and secondly that all accounts of the type cash at bank and in hand are reconciled with the according bank statements.

i) Has the Report of checking the cash art. 131, 142 NGW, art. 81 NARGC (Model 15F) been included in the Notes? (MD 23th Sept. 1991 modified by MD 10th Jan. 1996)

Model 15F is an official summary document testifying the

¹¹¹ These categories are exactly the same as in business accounting legislation (RD 8th Oct. 1976), viz. the categories 1 to 5 for balance sheet accounts and 6 to 7 for P/L accounts.

execution of the prescribed "checking procedures" regarding municipal cash activities.

j) Has the Summary of budgetary and accounting result been included in the Notes or attached to the budgetary account? (art. 75, par. 1 NARGC; Guidelines Nuttynck 1996, p. 5-6)

This summary which is mostly printed at the end of the budgetary account, is a table synthesizing both the "budgetary result" and the "accounting result" in the budgetary accounting system.

k) Has the Reconciliation of the budgetary accounting result with the financial accounting result been included in the Notes or been attached to the budgetary account? (art. 75, par. 1 NARGC; Guidelines Nuttynck 1996, 3., p. 14)

This is a statement representing a detailed reconciliation between the "accounting result ordinary service" from the budgetary accounting system and the "current result" from the financial accounting system.

l) Has the Comparison of the budget with the budgetary accounts been included in the Notes or been attached to the budgetary account?

This item is not literally made obligatory by NARGC, but it is an important means to report on the execution of the budget.

4.1.3.11 Adequacy and usefulness

A number of features are not directly imposed by legislation and regulations, but can be highlighted in order to measure indirectly the outcomes of the the legislator's intention of more objective and useful information. This critical approach could be called a kind of "metacompliance", which is implicitly and in very general terms requested by *Model 14*, 5/*MD 23th Sept. 1991*.

Items such as readability, understandability and clarity have been stressed also in foreign publications such as Piolo (CIGAR 1995, p. 17) who complained about the poor readability of municipal reports. Similarly Vela-Bargues (CIGAR 1995, p. 1-2) mentioned the problems of readability in Spain also due to the volume of the provided information.

Being interested in the use of the annual reports Faber & de Jong (1988, p. 2) concluded a rather poor understandability for The Netherlands. Oettle (FAM 1988, p. 271) noticed for West-Germany that citizens to whom public authority reports are addressed do not understand them or with great difficulty or only partially.

Finally, in empirical business accounting research the requirements of readability and the understandability of annual reports are sometimes a direct part of the examination (Peasnell 1981, p. 107).

Without attempting to obtain a complete picture, the following criteria can be proposed; they are all inspired by previous accounting and financial research.

a) Education, readability: Have guidelines been included on how to read the annual accounts and on how to interpret the figures?

A kind of user's manual with explanation of terms, glossaries, definitions of certain major issues, examples of how to interpret ratios, etc. could be very useful.

b) Readability, understandability, interpretation: do the annual reports contain an analysis of the budgetary accounts with ratios, performance indicators, statistics?

c) Readability, understandability, interpretation: do the annual reports contain an analysis of the annual accounts with ratios, horizontal and vertical statistics, cash-flow analysis?

d) Readability, understandability: to what extent have are pictorial¹¹² and graphical presentations been used?

e) Readability, understandability, user friendly: have different colours of paper been used?

There are a lot of municipalities which use pages of a different colour and sometimes thicker pages in order to separate the different parts of the annual reporting. This improves the readability of the annual accounts and indirectly increases the compliance with the accounting regulations. But, the measurement of this kind of feature is difficult to define. Is the number of those coloured pages decisive? Do they have to be thicker? Is their colour important? Are their headings important?

Therefore, the study will only look at the number of the sorts of coloured pages on which information was printed other than white.

f) Readability, understandability: have the pages of the annual reports been consecutively numbered? Obviously, it is difficult to consult reports without consecutively numbered pages. Moreover, if copies are made the completeness is not guaranteed.

¹¹² Pictorial presentations and similar support are even more important than in the profit sector as also motivated by Jones & Pendlebury (ABR 1982, p. 133): "given that in nonbusiness organisations financial data do not satisfactorily capture measures of output".

4.1.4 Regulations not considered

Apart from the implementation regulations suitable and qualified for examination, there still exist a number of regulations which are not considered in this study for various reasons.

A first group of items is not studied because their adoption is obvious (a).

Others are left out because they are formalistic (b) and do not necessarily have a serious impact on the accounting output.

Some rules are ignored due to their lack of importance (c). A few are left out because they are difficult to operationalise (d) in spite of their relevance and lastly there are some relevant regulations which are not yet applicable (e) for the first accounting year.

(a) Compliance is rather obvious

- * Have all balance sheet items been disclosed in BEF? (art. 17, par. 5, RD 2nd Aug. 1990). The accomplishment of this requirement is rather obvious.

- * Some items in the annual accounts exclude each other: e.g. if 13031 *Loss for the financial year* is filled in, 13033 *Profit for the financial year* must be zero and vice versa, ... The actual compliance is all the more obvious since it is likely that the accounting software guarantees the correctness of such logical relationships.

- * Did the obligatory first drawing up of assets and liabilities as of 1st January 1995 take place? (art. 17, par. 4, art. 92, RD 2nd Aug. 1990).

- * Obligatory double-entry accounting (art. 41 RD 2nd Aug. 1990).

(b) Formalistic

- * Obligation of keeping a detailed, complete and valued inventory of all goods, properties, rights, ... (art. 19 RD 2nd Aug. 1990). This question is not relevant since it is only an internal requirement.
- * Each journal entry has to be justified with pieces of evidence (art. 39, par 1 RD 2nd Aug. 1990).
- * Regarding each piece of evidence there are a number of formalistic procedures such as a sequential number, the financial year, the budgetary article, ... (art. 39, par. 2, RD 2nd Aug. 1990).
- * The journal entries are registered day by day (chronologically) from 1st January to 31st December, ... (art. 39, par. 3, RD 2nd Aug. 1990).
- * The G/L accounts are extended by individualised accounts which are treated simultaneously in the accounting system (art. 42 RD 2nd Aug. 1990).
- * The structure of the legally defined *Chart of Accounts* has to be respected (art. 44 RD 2nd Aug. 1990).
- * The amounts disclosed in the balance sheet and in the P/L account have to be taken directly from the trial balance (art. 77 RD 2nd Aug. 1990).
- * The adjustment and reclassification entries have to be recorded between 1st December and 15th February of the next year (art. 73 RD 2nd Aug. 1990).

(c) Lack of importance

- * If a foundation or legacy has been established in favour of the municipality and the costs are funded by own revenues (self-supporting), a separate accounting

system has to be developed adopting the same rules as for municipalities (art. 6 MD 30th Oct. 1990). It can seriously be assumed that this kind of situation is in reality not sufficiently relevant.

* Reconciliation stocks: the changes in stocks have to be in conformity with the stocks of current year and the stocks of previous year according to following formula¹¹³:

$$30t-1 + 76400 - 66400 - 66201 + 66202 = 30t$$

* Reconciliation provisions for risks and charges: analogously as for stocks, changes in provisions have to be in equivalence with the provisions of the current year and the provisions of the previous year according to following formula¹¹⁴ (Verheyden 1996, Chapter 1, p. 38):

$$\begin{aligned} &16000 \text{ VI' Provisions for risks and charges } t \\ &= 16000 \text{ VI' Provisions for risks and charges } t-1 \\ &+ 66621 \text{ VI.E. Addition to provisions for risks and charges} \\ &- 66622 \text{ VI.E. Use of provisions for risks and charges} \\ &- 77111 \text{ VIII'A' Extraordinary adjustment of provisions for risks and charges} \end{aligned}$$

(d) Difficult to operationalise

* Has the adjustment between amounts falling due after more than one year and amounts falling due within one year been recorded? (art. 28 RD 2nd Aug. 1990)

¹¹³ This test could have been incorporated but only a very limited number of municipalities did disclose stocks.

¹¹⁴ This test cannot be executed for the financial year 1995 since it is the first financial year for most of the municipalities. Moreover, only one municipality disclosed provisions.

* Has the obligatory distinction¹¹⁵ between the value of land and the value of immovable buildings been respected? (art. 20 RD 2nd Aug. 1990).

(e) Not yet applicable

* Reconciliation capitalised results (Verheyden 1996 Chapter 1, p. 9):

12000 II' Capitalized results t
 = 12000 II' Capitalized results t-1
 + 13011 III'A' Cumulated loss prior years t-1
 + 13013 III'A' Cumulated profit prior years t-1
 + 13021 III'B' Loss previous year t-1
 + 13023 III'B' Profit previous year t-1
 + 13031 III'C' Loss current year t-1
 + 13033 III'C' Profit current year t-1
 - 13011 III'A' Cumulated loss prior years t
 - 13013 III'A' Cumulated profit prior years t
 - 13021 III'B' Loss previous year t
 - 13023 III'B' Profit previous year t

¹¹⁵ Nevertheless, a similar test will be worked out concerning the distinction between the natures 241 Land of constructions and 242 Constructions and similarly between the natures 261 Land of watercourses and 262 Watercourses.

4.1.5 Conclusions

In order to operationalise the extent of compliance of the municipal accounting practices, the general "assertions-framework" of the audit-discipline is applied.

As such the different issues concerning compliance problems, adoption problems and disparities can be covered. These issues are completeness, realness, ownership, valuation, cut-off, classification, mechanical accuracy and disclosure. Although implicitly included in the "disclosure", timeliness and formalistic disclosure requirements are added as issues because of their particular relevance. The elements of "adequacy and usefulness" are not strictly regulated by NARGC, but they form an important part of the disclosure and therefore they are also added in the analysis.

The findings regarding the "formalistic disclosure requirements" and "adequacy and usefulness" will be summarised in Chapter 13, 13.2 Overview accounting output 1995, whereas the other findings will be discussed more extensively in Chapter 13, 3.

Referring to the limitations as mentioned in the beginning of the concept, this study simply cannot cover the compliance in all its different aspects. Nevertheless, one could argue that the series of elements representing the extent of compliance provides a substantive view on the adoption of the reformed accrual accounting system.

4.2 COMPLIANCE INDEX

4.2.1 Definition - development

4.2.1.1 Need for a Compliance Index

For Research Question 3 (RQ3) the dependent variable (Y) is the compliance with legislation and regulations regarding financial accounting and annual accounts. To operationalise this level of adoption, a construct called "*compliance index*" (CI) is needed.

An important motivation for the use of a compliance index is firstly the mass and variety of accounting information to be recorded and to be disclosed. Secondly, the assumed variation across municipal accounting practices is relevant and it should be made possible to capture this variation. Several studies reveal huge variations and cross-sectional differences. As mentioned by Ingram (JAR 1984, p. 131-132) an earlier CSG-survey¹¹⁶ revealed a serious variation across state government accounting practices.

Surrogates of the extent and the quality of disclosure could be selected as alternatives for operationalising the dependent variable. Such example are:

- the length of the report measured in number of pages¹¹⁷ (among some other indicators) (Volmer 1992);
- an enclosed unqualified audit opinion (Magann 1983, among some other indicators);

¹¹⁶ CSG = Council of State Governments: "State Accounting Project Survey 1978".

¹¹⁷ The municipality publishing annual accounts with the most pages was *ceteris paribus* assumed to have the highest disclosure index. However, a first problem is that the larger the annual reports, normally the worse the readability and the accountability. Secondly, Ball & Foster (JAR 1982, p. 176) criticize the empirical accounting research theme: "more disclosure is better". They posit that analytical research has demonstrated that "more disclosure is not necessarily better". Although the transferability of this statement has not been directly proven for public sector accounting, it remains a serious threat.

- the achievement of a Certificate of Conformance Program MFOA/GFOA as a result of meeting GAAP requirements and providing additional disclosure (Evans & Patton JAE 1983; Evans & Patton JAR 1987);
- the use or otherwise of GAAFR standard accounting and reporting methods (Baber & Sen JAPP 1984).

However, the concept of Ingram's *disclosure index* (JAR 1984), upon which the construct of the *compliance index* is inspired, has been a *milestone*¹¹⁸ in governmental accounting research and has directly or in a modified way been used in a great number of similar accounting studies (Robbins & Austin JAR 1986; Ingram & Robbins 1987; Ingram & DeJong JAPP 1987; Banker, Bunch & Strauss 1989; Giroux JAPP 1989; Banker, Bunch & Strauss 1989; Cheng JAPP 1992; Volmer 1992; Allen & Sanders FAM 1994; Coy, Tower and Dixon FAM 1994).

4.2.1.2 Object of measurement

Different studies examined the empirical outcomes of governmental accounting systems in terms of a *disclosure index* or similar other kinds of measurement. Table 4.1 reports the most important studies, focusing on the measurement objective.

None of these studies has focused on the technical accounting issues of **adopting and implementing** a drastic accounting reform and on the **compliance with the adapted requirements** as set forward by the legislator.

In the present study the objective is not just to measure the extent of disclosure as in the other studies applying disclosure indices. The disclosure of the annual reports itself is not that important as an objective. It will be treated rather as a means of examining the kind of accounting

¹¹⁸ Cheng (JAPP 1992, p. 6) motivated the Ingram's index stating that: "... index has been found to be robust when compared to weighted measures and has been used in prior research to proxy both quantity and quality of accounting disclosure ...".

practice, the success and the harmony of implementing the reform and thus the compliance with the accounting requirements.

Therefore, the *compliance index* aims at operationalising the level of compliance, adoption of the financial accounting practice with the accounting legislation and regulations in the direction of the users' usefulness mainly by examining the accounting output.

Table 4.1: Measurement objectives in governmental accounting studies

Studies	Outcome measurement objective
* Robbins & Austin 1986 * Giroux 1989 * Volmer 1992	Disclosure index concentrating on <u>what is shown</u> and <u>on how it is shown</u>
* Ingram 1984 * Banker, Bunch & Strauss 1989 * Cheng 1992 * Allen & Sanders 1994 * Coy, Tower & Dixon 1994	Disclosure index on <u>which accounting practice</u> is used and thus <u>disclosed</u>
* Evans & Patton 1983 * Evans & Patton 1987	Meeting GAAP requirement and thus providing <u>additional disclosures</u>
* Zimmerman 1977	<u>Differing accounting practices</u> measured by the degree of audit and the length of the reports
* Baber & Sen 1984	Meeting GAAFR requirements (standard accounting and reporting methods) measured by the <u>use of GAAFR fund definitions</u>
* Magann 1983	<u>Disclosure practices</u> measured by technical features such as #pages, #exhibits, timeliness, audit opinion, MFOA certificate; in other words concentrated on the qualities of the disclosures

4.2.1.3 Scope

The construct *compliance index* is intended to operationalise more than just the disclosure practices in that also technical accounting issues and practices are covered.

The goal is to be able to draw conclusions about both the accounting output and the accounting process and practices, whereas most of the other studies limit their scope to the accounting output and disclosure.

A second element of the extension in scope is the **timeliness** of the accounting implementation. Timeliness will also be a factor of the *compliance index*.

In the few existing governmental accounting studies timeliness is examined independently as a sort of a disclosure index (Coy, Tower & Dixon FAM 1994). Only Volmer (1992) has incorporated the variable timeliness of the annual accounts in his disclosure index with an arbitrary weight of 20% being one of the 10 factors. In their study Dwyer & Wilson (JAPP 1989) particularly examined the timeliness of the municipal accounting output, but from a different angle. They interpreted and checked timely reporting as a means of signalling competent performance.

In the present study the factor timely reporting is a proxy for measuring the ability, willingness¹¹⁹ and actual performance to comply with the new accounting regulations.

Thirdly, the scope of the *compliance index* is extended as good as possible to a user point of view.

In Ingram's *disclosure index* (Ingram JAR 1984; Banker, Bunch &

¹¹⁹ According to an interviewee of the Ministry of the Brussels' Capital District, the willingness and timeliness of Walloon municipalities is a lot lower than in the Flemish municipalities. Even in the 19 municipalities of the Brussels' Capital District there would be important arrears in working out the reform presumably due to the unsatisfactory figures of some overspending municipalities.

Strauss 1989) the point of view of the possible users of the state annual reports and their perceived usefulness was not taken into account. The approach was purely technical (bottom up) concentrating on the conformance with GAAP regulations. As remarked by Banker, Bunch & Strauss (1989, p. 31) it should be noted that by defining an index dichotomously based on GAAP regulations, the quality or extent of disclosure is not taken into account. They even remarked that Ingram's index does not distinguish between Notes which were not included because they were not applicable and Notes which were incorrectly left out. In the present study the *compliance index* is designed to measure practices and disclosures which are applicable for all municipalities. The quality and the extent of practices and disclosure is all the way examined under RQ1 and RQ2.

For a similar reason as in the study of Ingram (JAR 1984), Allen & Sanders (FAM 1994) developed and used a *disclosure index* to measure cross-sectional variations in disclosure practices of US municipalities. Their disclosure index was somewhat extended and more technical-contextual (bottom up and a bit top down) taking both the conformance with regulations as well as an attempt of measurement of the user information needs (at least as seen by the municipal staff). They did not work out this "user need"-ingredient by taking the total number of possible accounting practices in the denominator of the *disclosure index*, but they only considered "the number of items identified by the respondents as being applicable to their city." (p. 181). As Allen & Sanders formulate it on p. 181: "The index, therefore, is a measure of a city's responsiveness to user information needs."

Instead of focusing on the user needs as such, the present study will be restricted to "fit for use". It is too early to build in completely the view of the user and to analyse it, plus the latter is an objective of the present study.

The *compliance index* is not meant as a value judgement of the

government accounting system reflecting the quality of the implementation. It is just a construct to be able to measure the succeeding of the reform (= "treatment") and the cross-sectional variations of municipal accounting practices. Measuring the quality of the implementation would be a different objective and would also consider the economical aspects of the reform, the efficiency and speed of the software, etc., which is as such not the target of this study.

4.2.2 Specification of the construct dimensions

4.2.2.1 Simple vs. compound index

The disclosure index as defined by Ingram (JAR 1984) could be called a *simple disclosure index*, which means that the different items forming the index have an equal, fixed weight on the index.

Robbins & Austin (JAR 1986) have also developed a unidimensional *simple disclosure index* in order to examine the possible determinants of disclosure quality of financial reports in local governments. Their *simple disclosure index* is not directly based on GAAP regulations or requirements, the index measures the extent of disclosure based on the literature and deemed useful by municipal bond analysts. Thus, the user needs receive a certain attention, but only from the point of view of bond analysts, not from a general users' point of view including the majority of the other users, such as citizens, voters, officials, central government, etc.

Robbins & Austin introduced a new concept by extending Ingram's approach to a so-called *compound disclosure index*. This index can be defined as the simple index enlarged by a variable weighting the underlying elements. As such the aim is to capture better the importance of certain elements. The weighting coefficients were elaborated by asking bond analysts to give their opinion.

Just asking the bond analysts to rank the elements and to assign an importance score may seem an objective way to obtain relevant information, but it can be criticized. *Firstly*, municipal bond analysts are not exclusively the prototype of users. *Secondly*, the question towards the analysts is limited to a financial, solvency use of the financial statements. *Thirdly*, there are no generally accepted importance criteria of what and how should be reported; moreover, such criteria are even less defined in the recent Belgian municipal

situation at that. Finally, from a methodological point of view it is the perception of the bond analysts (i.e. "what they think") which is processed, rather than the factual importance of the results of the differing reporting practices.

Anyway, the authors admitted that a comparison of their results did not reveal any added value when using the *compound disclosure index* in particular, rather than the *simple disclosure index*.

Ingram & DeJong (JAPP 1987) also used a *compound disclosure index* similar to Robbins & Austin, but mitigated the importance of the weighting. From the 27 accounting disclosures handled by Robbins & Austin (JAR 1986), 10 items were selected to derive their "*disclosure index*". Basically the same weights as calculated by Robbins & Austin were taken. As stated by Ingram & DeJong, the index is a measure of disclosure and a measure of conformity to GAAP (p. 256).

It is remarkable that they examined the results of the weighting and found that:

- the weighted and unweighted factors were similar,
- the results were not particularly sensitive to weighting.

These findings were similar to the ones of Robbins & Austin.

Volmer's (1992) *disclosure index* resembles at first sight the compound index of Robbins & Austin in that there is a weighting of the constituent parts of the index. But, the weighting coefficients which were deemed useful by Volmer were more or less arbitrarily chosen. According to Volmer these coefficients would have been based on previous user need information. His index is mainly concentrated on the **volume** of the disclosure, not on the accounting background.

Also a rather fixed compound index called MAD = *modified accountability disclosure index* was used by Coy, Tower & Dixon

FAM 1994 in their research¹²⁰ on the reporting of schools and universities. The quality of the annual reports was evaluated using 26 items in 4 groups; the items were weighted on a 3 point-scale and the evaluation of the individual disclosures is based on a 5 point system.

For the Flemish municipalities the approach of a compound compliance index using weights based on user perceptions is abandoned. The most important reason is the non-significance found in the previous studies. There is also a conceptual reason:

the *compliance index* is not intended to measure the accounting outcomes directly in favour of the user, but to measure the outcomes vis-à-vis the concept and the regulations of the reform be it with inspired by a user's point of view.

Therefore, the *compliance index* will be set up to capture the different elements as foreseen or implied by the regulations in an equal fixed way without weighting. As such the problem of arbitrary weighting is simplified.

¹²⁰ The authors investigated the response of the recommendations of PSAC in the mandatory accounting and reporting reform for TEI's in New Zealand. (PSAC = Public Sector Accounting Concepts, introduced by the New Zealand Society of Accountants NZSA; TEI = Tertiary Education Institutions).

4.2.2.2 Cross-sectional vs. longitudinal

Lin, Baxter & Murphy (FAM 1993) worked out a longitudinal approach and examined the degree of compliance of governmental accounting practices with PSAAC standards in time, which is certainly interesting to study evolutions.

As in the majority of similar governmental accounting research, the approach will concentrate on cross-sectional variations in the *compliance index*. Moreover, the reform in Belgium was only recently installed which makes it too early to set up longitudinal studies.

4.2.3 Selection of observable indicators

An extent of compliance score was assigned for each of the 66 elements of the *compliance index*. For a more close definition of the applied elements there is referred to Chapter 9: Measurement of variables.

4.2.4 Validity checks and limitations

Robbins & Austin (JAR 1986 p. 413) use information items to be included in the *index* which are equally applicable to all municipal reporting entities, which is also the point of departure in the present study. In other studies (e.g. Volmer 1992; Coy, Tower & Dixon FAM 1994) some items are not applicable for each governmental entity and thus corrections become necessary and additional validity threats may occur.

It is noteworthy to mention that the *compliance index* also includes a number of items, particularly adequacy-items which are not directly required by NARGC. Robbins & Austin (JAR 1986, p. 413) motivate this approach by referring to Copeland and Ingram¹²¹ where the deficiencies of a question set containing only required items are discussed. It seems preferable not to limit the examined disclosure items to just the strictly imposed ones. Ingram's *disclosure index* (JAR 1984) on the contrary was restricted to only the items required by GAAP.

¹²¹ Copeland & Ingram, *Municipal financial reporting and disclosure quality*, Reading, Addison-Wesley, 1983, p. 53.

4.3 FACTORS (X_i) AFFECTING THE COMPLIANCE INDEX

4.3.1 Objective

The third research objective is to look for possible reasons and associations of varying municipal accounting practices and to test these. It is interesting to explore factors associated with or explaining cross-sectional differences in compliance and implementation.

This study draws strongly on prior research and on the Belgian governmental environment when specifying the different factors and incentives to be considered.

4.3.2 Associated factors

4.3.2.1 Tradition

In previous governmental accounting studies the factor experience with governmental accrual accounting has almost never been considered. It is the typical of Belgian accounting reform to have foreseen a period of transition of about 5 years¹²².

Some municipalities have already a few years of experience. The ones that started before 1994 are mostly pilot-municipalities aiming to achieve financial accounting know-how. The others are municipalities which started earlier just to be prepared, to obtain experience and to avoid the surprise of having to start at once in 1995. These municipalities have freely chosen for their "quick-start".

Of the 11 experienced municipalities in the sample there are 3 which started on 1st January 1992, 1 started on 1st January 1993 and the other 7 started on 1st January 1994 (Nuttynck

¹²² The regulating law dates from 2nd August 1990 and the ultimate date of adoption was 1995.

1994).

This period of transition makes it interesting to examine the effect of experience on the level of adoption and compliance. The hypothesis is that the factor experience contributes positively or is positively associated with the level of implementation and compliance. The surrogate standing for experience is categorically scaled (i.e. experienced or not). The data for experienced municipalities are derived from the data provided in the IBR course (Nuttynck 1994).

4.3.2.2 External influence

4.3.2.2.1 Accounting and auditing relationships

Accounting and auditing relationships are considered to be an important variable making operational the external influence. There are two surrogates for measuring this concept: the influence of related parties and the support of professional accounting consultants.

A third possibility might have been the audit-influence of the Oversight Bodies. However, the Oversight Bodies are just embarking on a financial audit of the annual accounts. Formerly, they adopted a rather formalistic budgetary accounting control system. Moreover, the Oversight Bodies do not have any experience regarding financial accounting or professional audit.

a) Influence of related parties

The factor "having relationships with business-like organisations" is hypothesised as leading to a superior *compliance index*. Such organisations already have some experience in business administration and a relationship with the municipality might be fruitful.

The linked organisations can be:

- municipal NFPOs,
- "ordinary" municipal enterprises,
- intermunicipal organisations.

The intermunicipal organisations would be an interesting object of study, but, this kind of relationship is not strictly linked to a particular municipality. This kind of organisation operates for a group of municipalities and has a separate accounting staff.

The remaining kinds of related parties, viz. the municipal NFPOs and the "ordinary" municipal enterprises are in general related to only one municipality. The "ordinary" municipal enterprises have to accomplish business accounting and it is reasonable to assume that the municipal NFPOs often work in an accrual accounting environment.

Therefore, it is assumed that the existence of these kinds of organisations contributes to the acquisition of municipal accounting experience.

The surrogate standing for accounting relationships is categorically scaled. The first category is municipalities having at least 1 "ordinary" municipal enterprise or municipal NFPO; the second category consists of the others.

This surrogate is somewhat rough in that the different characteristics are not qualified but reduced binary. For example, the "ordinary" municipal enterprises are treated as if they were all the same, of the same size, of the same kind, ... , which is not so in reality. Nevertheless, this concept hopefully contributes to the research question.

The data of the occurrence of municipal NFPOs and "ordinary" municipal enterprises was gained by means of question I-2 and I-3 of the survey.

Except for the factor influence by central government measured

in terms of *intergovernmental revenue/total revenue*¹²³ the accounting influence of related parties has not been tested in previous studies.

b) Support of professional accounting consultants

Municipalities have more or less been isolated from business-like accounting. Since the reform, they have been looking for consultants.

There are different kinds of external consultants and different kinds of relationships. The external consultants are mainly two specialised public accounting firms (i.e. Moores & Rowland and Euraccounts, which are not part of the Big Six¹²⁴. Mostly, these accounting consultants have supported the first drawing up of assets and liabilities and are providing services for the current bookkeeping. Based on their leading position and specialisation, they can be considered as professional municipal consultants.

Although holding a smaller market share, there are also the IDAC- accountants and IBR-chartered accountants working for municipalities and delivering advisory and implementation services. Apart from these functions it is possible for a municipality to engage other experts.

The support of consultants can be divided in a permanent support on the one hand and a rather temporary support on the other hand. The temporary (once only) support consists of consulting in the setting up of the new accounting system and the first drawing up. The suppliers of permanent support are continuously giving advice and backing up the municipal accounting activities.

¹²³ See Ingram JAR 1984, Robbins & Austin JAR 1986, Cheng JAPP 1992.

¹²⁴ for the year 1995. Approximately mid-1996 a transfer of the municipal accounting activities of Euraccounts to Ernst & Young was agreed.

This study concentrates on the permanent support and poses that the permanent support of the professional accounting consultants will lead to a superior *compliance index*.

The scale is dichotomous and the data are derived from question III-2.

The accountancy consultancy factor has not been considered in other governmental studies¹²⁵. Nevertheless auditing relationships were taken into account. In a few studies the categorical factor of a CPA-auditor (Y/N) (Magann 1983; Ingram JAR 1984; Robbins & Austin JAR 1986) or the factor outside auditor (Y/N) (Volmer 1992) was built in. In a couple of studies a set of auditing characteristics was even set forward (Dwyer & Wilson JAPP 1989; Cheng JAPP 1992). As mentioned already, for the Belgian context there is no professional audit installed and the control of the Oversight Bodies is not (yet) suitable for consideration.

4.3.2.2.2 Engagement: Regional Treasurer

In a number of smaller municipalities the function of the Municipal Treasurer is performed by a Regional Treasurer. The Regional Treasurers are assigned as financial officer in more than one local government. The Regional Treasurer can have the function of Municipal Treasurer in two little municipalities at the same time. More frequently found is the combination of a municipality together with one or more OCMWs.

Although there is no necessary business relationship, one might assume that a Regional Treasurer is more experienced than a "normal" Municipal Treasurer since there is the mutual experience and exchange of know-how. In addition, the Regional Treasurer disposes of a certain independence in respect to the

¹²⁵ The role of the accountant and his potentially homogenising training is a factor which emerged in the user need study of Butterworth, Gray & Haslam (FAM 1989, p. 84). They did not enlarge upon this factor but seemed to encourage further research.

(single) Muncipal Treasurer.

No study to date has examined the influence of this kind of organisation.

4.3.2.3 Management incentives

4.3.2.3.1 Professionalism accounting staff

"Adoption of GAAP may be one device for signaling this professionalism." (Ingram JAR 1984, p. 131)

a) Level of education

A first observable indicator measuring the professionalism of the accounting staff is the level of education. This item has never been incorporated in other referenced governmental accounting studies except by Evans & Patton (JAE 1983, p. 145) who coded the municipality dichotomously in respect of the CFO having no more than a high school education.

Officials have a different opinion as to whether university trained people in the function of Municipal Treasurer or employed in the accounting staff would be a positive factor towards the adoption of the accounting reform. This kind of thinking is also a motivation for examining the level of education.

The level of education is split up and surrogated by:

- the compound average level of finished studies,
- the average level of the provincial administration school.

The data are derived from question III-1 and they are elaborated as follows:

Number of employees graduated:	weighting factor
University or high school long term (LT)	2
High school short term (ST)	1
Secondary education (S)	0

The compound average score (STAFF) for the level of finished studies equals $(2*LT + 1*ST + 0*S) / (LT + ST + S)$

The elaboration is similar for the average level of Provincial Administration School: the average level of the provincial administration school (PROVSTAFF) equals (Number of employees graduated) / (LT + ST + S)

An advantage of this approach is that the scores over the different-sized municipalities remain comparable. Secondly, the analysis is not too sensitive to the occasional omitting or exaggerating the number of accounting employees. As a matter of fact an inexact number is likely to occur since the definition of who belongs to the accounting staff is not easily made and part-timers could be mixed up with full time personnel¹²⁶.

A disadvantage is that there undeniably a variety exists within the 3 levels of education. Referring to the interviews in the pretesting phase and in the survey phase, it appeared that for example a number of Municipal Treasurers studied either law or political and social sciences; there are also economists or commercial engineers and there is even an academically formed mathematician. Examples of other differences which are difficult to capture are:

- some employees have been enrolled for additional courses or weekend education;
- a distinction between young and old accounting personnel was not made and what to do with persons who tried but did not succeed in a certain education or training either.

Lastly, the weighting coefficients are somehow arbitrary.

b) Membership of professional institutions

This kind of characteristic was applied as an observable indicator on a number of occasions. Whether or not the Chief

¹²⁶ See also Chapter 8: Investigation questions.

Financial Officer (CFO) participates in the GFOA (= Government Finance Officers Association) has been a variable in several studies of Evans & Patton JAE 1983¹²⁷; Evans & Patton JAR 1987; Dwyer & Wilson JAPP 1989; Allen & Sanders FAM 1994¹²⁸.

The memberships set forward in this study as a measure for professionalism are BIB and IDAC. The membership of IBR is not applicable since Belgian chartered accountants are not allowed to work as an employee of any firm except for a chartered accountants' firm¹²⁹.

The memberships are scaled dichotomously. Contrary to the averaged level of education in which all the members of the accounting staff are added, the presence of a member of BIB or IDAC among the accounting personnel is interpreted as a link with the professional institution. It does not matter how many memberships there are. The reason for this decision is that one link is sufficient to have a relationship with a professional institute and keeping up the positive influence; being a member of BIB, IDAC does not only presuppose a certain level of education and know-how, but it is also an indicator of an ongoing professional link to the future.

The necessary data are taken from the responses of question III-1 of the questionnaire.

¹²⁷ The participation was actually in the MFOA Executive Board (MFOA is the predecessor of GFOA). An alternative measure for the professional activity of the municipal official was whether the municipality participated in the National Council on Governmental Accounting.

¹²⁸ Allen & Sanders did not focus on the whether or not the participation of the CFO in GFOA, they put on emphasis on whether or not the cities tried to obtain the *Certificate of Achievement for Excellence in Financial Reporting* (=COA) installed by the GFOA.

¹²⁹ This is not systematically the case in other countries, e.g. The Netherlands where chartered accountants (i.e. "registeraccount") can be working for/ can be on the pay-roll of business enterprises or governments, etc.

c) Business accounting experience of the accounting staff

A number of municipalities engaged persons who had already built up some experience in business accounting in the private sector. These municipalities were thus aiming to facilitate the adoption and implementation of the accounting reform by means of "buying" the know-how by engaging experienced experts on their pay-roll instead of "making" it themselves.

As for operationalising the memberships above, the approach is dichotomous. It is of little importance how many accounting employees possess a business accounting experience as long as there has been an introduction of business accounting principles, know-how and techniques. One person introducing and "teaching" or helping to understand this know-how is sufficient. Since there is no clear pattern in the kind of businesses the experienced employees come from, this feature is not qualified in the variable business accounting experience.

A last problem to be dealt with is the number of years of business accounting experience. One could argue that this is an important factor reasoning that the more years of experience one has, the better it would be. However, there are some opposite effects. Accounting employees with a lot of business accounting experience are older and thus often did not follow any recent accounting courses on modern topics. A second less optimistic remark is there is a risk that these "more settled" accounting employees will not be specifically interested in the municipal accounting problems, but are more likely to apply their previous general accounting ideas. On the other hand the "older" employees are more experienced, which is not the case for the younger employees who have had only a short business accounting experience.

A remark in favour of the younger is that they are likely to have a higher graduated level to start with in respect to the older perhaps more selfmade persons.

The factor of business accounting experience is not incorporated in other studies.

Summarising, the variable business experience will be treated dichotomously disregarding the number of persons and disregarding the number of years of experience. The data are supplied by question III-1.

d) Training per person of the accounting staff in days

According to the *Ministrial Circular Letter of 26th Oct. 1990* training programmes have been set up. Also some of the softwarehouses have created training courses for municipal accounting personnel.

The questionnaire asks for returning information on the participation of accounting staff in training courses.

For the same reasons as in the paragraph on business accounting experience and memberships it is not the intention to measure accurately the number of days of a certain course in respect to a certain municipal denominator. What is interesting in the context of the study is whether the general factor of having followed training is associated with the *compliance index*. Therefore, the variable is applied in a dichotomous way.

The factor "training" was not examined in other studies.

A factor to proxy the professionalism of the accounting staff which was used a number of times in other studies are the salaries of the accounting personnel (salaries accounting administrator Ingram JAR 1984; wages public officials Baber JAE 1983; Baber & Sen JAPP 1984; salary CFO Evans & Patton JAR 1987; average earnings Cheng JAPP 1992).

This kind of factor is left out in this study, which can be

motivated as follows:

- the range of the wages of the Municipal Treasurer and Municipal Secretary are legally defined and regulated (Gemeentelijk Zakboekje 95-96 p. 118-119);
- agreements on salaries are certainly not as flexible as in the private sector;
- a bias in favour of bigger municipalities can occur since larger municipalities are allowed to pay higher salaries particularly for Municipal Treasurer and Municipal Secretary.

4.3.2.3.2 Reliance on debt

Previous studies have posited that the reliance on external debt being a management incentive is leading to more accounting disclosure or better qualities of disclosure¹³⁰.

Ingram (JAR 1984, p. 138-139) operationalised the construct in terms of long term debt per capita. He found a positive but insignificant relationship for state governments. Baber & Sen (JAPP 1984, p. 97) looked at the mean net borrowing in dollars over 10 years. They found a negative insignificant relationship in that that GAAFR states seemed to have a lower mean debt than non-GAAFR states.

For local governments Robbins & Austin (JAR 1986, p. 417-418) revealed a positive significant relationship applying the same measurement concept as Ingram (JAR 1984), namely long term

¹³⁰ This subject of ideas can be illustrated as follows:
 "Larger dependency on external funding sources could lead to increased disclosure." (Ingram JAR 1984, p. 130).
 "... disclosure incentives increase as the portion of debt in a local government's financial structure increases." (Ingram & DeJong JAPP 1987, p. 251)
 "... elected officials can reduce interest costs by complying with standard reporting practices." ... "Thus, we expect that the use of debt financing increases incentives to use standard reporting methods." (Baber & Sen JAPP 1984, p. 95). It is noteworthy that Baber & Sen's study is about the voluntary use of the GAAFR reporting method whereas this dissertation is about the obligatory use of the solely defined reporting method.

debt per capita. Also for local governments Evans & Patton (JAR 1987, p. 149) found a positive significance defining their variable to be the general obligation and revenue bonds outstanding.

Cheng (JAPP 1992, p. 14) suggested that debt appeared to be more of a factor at local government level as compared to the state government level.

In Cheng's study (JAPP 1992) the long term debt per capita was used, but for the indicator long term debt the factor loadings in the LISREL analysis were insignificant and thus not further examined.

In the study of Ingram & DeJong (JAPP 1987, p. 262) the debt concept was defined as the debt in terms of a percentage of total revenue.

This study is not limited to just disclosure but also looks at the adoption and compliance of the reformed accounting system. Nevertheless, the approaches towards disclosure are useful in that they focus on the output. To accomplish the examination Ingram's definition is chosen, namely the long term debt per capita. This ratio has the advantage of not being dependent on creative accounting practices since debts are a monetary item with almost no existence, valuation, and ownership problems as is the case with some items on the asset-side.

On the other hand the expected relationship as cited in previous studies may not be overstressed in the Belgian situation. Municipalities are not very sensitive regarding borrowing conditions since there is a steady tradition of taking out loans with the Gemeentekrediet which is the mutual bank of all Belgian municipalities.

4.3.2.3.3 Municipal wealth

Ingram's study (JAR 1984, p. 137) incorporated the construct "State Wealth" belonging to the factor "Management Incentives". The construct is surrogated by the variable "Own Revenue Per Capita". Ingram assumed that this factor is positively associated with an increased disclosure because of the signals of management quality which provide benefits to the individual politicians (p. 131).

This approach was replicated for local governments by Robbins & Austin (JAR 1986, p. 418). Cheng (JAPP 1992, p. 18) also took over the measurement surrogate be it as a part of her own construct: "Bureaucracy needs and abilities".

In the present study a wealthy municipality is supposed to have a management incentive on being more in compliance and on showing more of the annual accounts. A first attempt to measure the municipality wealth could be worked out by calculating the **Capital and Reserves per capita** per municipality. However, this approach is likely to be influenced by "disclosure management". In other words not only actual the wealth is measured, but also the intention to show that wealth.

Therefore and in conformity with Ingram's approach the municipality wealth will be measured by **Own revenue per capita**, although some remarks need to be made. Firstly, a high revenue per capita could be due to the rather poor financial situation necessitating an increased revenue. Secondly, municipalities with a high ratio could already be at the top of their possibilities whereas a municipality with a lower ratio could still increase the level of own revenue per capita and thus actually become "richer".

The own revenue per capita consists of:

- Additional tax on real estate taxation (Opc OV)
- Additional tax on income tax of persons
- Miscellaneous municipal taxes

The first two categories are supplementary taxes on state taxes based on an individual municipally decided tax rate; they make up for 79% of the own revenue (De Gemeentefinanciën 1996, p. 29). The third category are a series of different municipal taxes such as garbage collection, parking, second residence tax, etc. This series is very heterogeneous and difficult to represent; according to Leroy (1995, p.86) in 1993 125 such taxes were applicable.

The data are gathered from the budgetary figures of the financial year 1994 (De Gemeentefinanciën 1996, p. 30-34).

4.3.2.3.4 *Municipal size*

In the majority of similar studies, the size of the governmental entity was one of the determinants of governmental accounting practices and financial disclosure characteristics. Except for Coy, Tower & Dixon (FAM 1994), who used total revenue as a proxy for the size of tertiary education institutions and Christensen & Mohr (FAM 1995) who took the number of paintings in museums, the other studies surrogated the institutional size by the **population**. Ingram's population (JAR 1984) did not attempt to measure the institutional size, it stood for the construct "complexity of government".

Other surrogates such as the surface, the level of expenditures, the size of the organisation's personnel, ... have never been taken into account. A number of studies measured the population size in a linear way; others transformed the population size in its natural logarithm¹³¹.

¹³¹ The background for the use of the natural logarithm ($\ln$) was the assumed non-linear relationship between population size and the expected output measure ("disclosure index") (Evans & Patton JAE 1983; Evans & Patton JAR 1987; Dwyer & Wilson JAPP 1989; Allen & Sanders FAM 1994). According to Evans & Patton (JAE 1983, p. 162) the results were generally unaffected if measures were taken without their natural logarithm.

The findings of these previous studies were not similar. For American States Ingram (JAR 1984) and Cheng (JAPP 1992) found that there was no significant relationship between government size (population) and disclosure practices. Likewise, insignificance was found by Evans & Patton (JAE 1983), Robbins & Austin (JAR 1986), Ingram & DeJong (JAPP 1987) and Dwyer & Wilson (JAPP 1989) for US municipalities. Allen & Sanders (FAM 1994) also examined US municipalities and found that smaller municipalities report less, but there was no significant power explaining their output "*disclosure index*".

However, Magann¹³² (1983) found a positive significant effect on attributes of accounting disclosure in American municipalities. Thus, the larger the municipality, the better the accounting attributes. On the other hand Evans & Patton (JAR 1987) found a slight, though significant negative impact of municipal size on their disclosure measure¹³³.

Baber's study (JAE 1983) showed a positive significant impact of population size with respect to the yearly audit budget of the American States, but this relationship does not measure accounting practices.

In Dutch municipalities Volmer (1992) found a positive significant relationship between municipal size and his *disclosure index*. A possible explanation for this phenomenon could be that Volmer defines the *disclosure index* in terms of volume (number of pages) rather than in terms of accounting quality or in compliance to regulations. Of the 10 constructs which constitute his *disclosure index*, 4 measure the number of published pages multiplied with a weight of 5.5 of the

¹³² Magann's (1983) examined attributes of the municipal accounting output were the number of pages and exhibits, the timeliness, the audit opinion and the obtaining of the MFOA Certificate.

¹³³ The disclosure measure of Evans & Patton (JAR 1987) was set up as a surrogate for measuring accounting qualifications. Their disclosure was measured dichotomously in having obtained (Y/N) a *Certificate of Conformance Program* (CCP) by GFOA as a result of meeting GAAP requirements and providing additional disclosure.

total weight 10.

On the other hand it is also true that the disclosure indices of Ingram (JAR 1984) and Robbins & Austin (JAR 1986) were based on the presence of predefined parts and information required by GAAP, no matter how many pages they consisted of. In other words, Ingram and Robbins & Austin focused on just the qualitative aspects without covering the volume for example measured in numbers of pages.

In the educational sector (US school districts) the institutional size did not appear to have a significant impact on the accounting practices (Banker, Bunch and Strauss 1989). For tertiary education institutions in New Zealand Coy, Tower & Dixon (FAM 1994) found no significance on the institutional size either.

According to Lüder's "Contingency theory"¹³⁴ the adoption and implementation of accounting reforms is easier to accomplish in smaller entities since they are more prone to adopt new accounting systems and they have less technical and administrative problems of implementing. The factor "size" is presented as a barrier in the development of the working out of the reform, although this assumption was not empirically tested by Lüder.

Summarising there are a lot of varying and sometimes contradictory findings considering the governmental entity's size and accounting practices.

An assumption which could explain the different findings is that the concept "size" covers at the same time two diverging factors. On the one hand a **negative factor** with following characteristics could be assumed:

- dominant fear for the unknown, older officials, less open-minded;
- disliking important changes and reforms;

¹³⁴ See Chapter 2, 2.5 UNDERLYING THEORIES.

- external professional influence is not desired or is too weak to be of significance;
- heavier resistance; slow adoption;
- not interested in attending refresher courses and training.

On the other hand, an assumed underlying positive factor could be circumscribed as:

- more competent, younger officials, open-minded;
- having larger possibilities;
- being able and willing to invest in staff, in experienced accounting persons;
- interested in renewals and innovation; faster in adopting;
- more relationships with other professionals.

In the present study the municipal size is hypothesized to affect the compliance index with a predicted positive sign.

As an additional validity check the possible contrast between positive and negative influences will be tested by using factors such as:

- * having followed training courses financial accounting
- * having called in accounting consultants in a permanent way¹³⁵
- * in the questionnaire there an open-ended question asking for the attitude and the personal satisfaction regarding the reformed accounting system is included at the end. The negative remarks are interpreted as a kind of resistance.
- * the dates of the responses in the survey are perceived as representative for the level of resistance
- * the time difference between the ultimate date and the date of enactment of the annual accounts (i.e. the overtime) is regarded representative for the level of

¹³⁵ There is no distinction within the accounting consultants; from the point of view of being willing to invest in consultants it does not matter if the consultant is a real professional or a would-be consultant. Thus, all the consultants are taken into account.

resistance

* having engaged business experienced accounting persons.

The size of each municipality is derived from Gemeentelijk Zakboekje 95-96 reflecting individual municipal key-items and data on 16th October 1995.

Looking at the size of the municipalities, a second indirect relationship becomes apparent: in Ingram's study JAR 1984, p. 137 the construct "professionalism" is amongst others approached by the salaries of the Accounting Administrator. Since in Belgium the salaries of the Municipal Treasurer are quite rigorously dependent on the size of the municipality, this variable is automatically and implicitly taken care off.

4.3.2.4 Form of government

In the literature the "agency theory" is several times applied on governments by looking at the factor Manager cities vs. Mayor cities (Zimmerman JAR 1977; Evans & Patton JAE 1983; Magann 1983; Robbins & Austin JAR 1986; Evans & Patton JAR 1987; Ingram & DeJong JAPP 1987; Banker, Bunch & Strauss 1989; Giroux JAPP 1989; Dwyer & Wilson JAPP 1989; Volmer 1992).

The Manager cities have an agency-relationship: City Council = *principal* and the Manager as chief operating officer = *agent*.

In Mayor cities there no such agency relationship. The Mayor as chief operating officer is not a subordinate of the Municipal Council, but equally elected by the voters. The theory states that hence manager cities will have a higher *disclosure index* because of the monitoring need. Zimmerman's study (JAR 1977) revealed that this kind of relationship was significant¹³⁶ in American municipalities.

Volmer used a similar independent factor, viz. municipalities with a finance manager per se and municipalities with a finance manager who is the Mayor. His findings were likewise as in the USA.

In Belgium the distinction between Manager cities and Mayor cities does not exist: each municipality is conducted by elected Mayor and Aldermen and appointed officials. The finance function is always assigned to a member of the College of Mayor and Aldermen; combinations are not possible. As a result the factor form of municipality is not included in the present study.

¹³⁶ Zimmerman found that 1) manager cities were significantly more audited than mayoral cities, 2) the annual reports of managers cities were significantly longer than the annual reports of mayoral cities implying a more important monitoring.

4.3.2.5 Audit

In a number of studies some audit issues are defined as independent factor or as surrogates. The following factors can be highlighted:

- * Audit opinion: qualified vs. unqualified. In Giroux's study (JAPP 1989) a mixed significance was found. Dwyer & Wilson (JAPP 1989) found a significant relationship in explaining the timeliness.
- * Auditor CPA or not: (Cheng JAPP 1992, Magann 1983)
- * Auditor size: auditor firm size as surrogate for the professionalism was significant (Robbins & Austin JAR 1986); audit agency budget relevant (Cheng JAPP 1992)
- * Internal vs. external audit: (Cheng JAPP 1992); independent or governmental significant (Dwyer & Wilson JAPP 1989); internal, semi-governmental or Big Six (Volmer 1992).

In the Belgian context external professional audit is non-existent and the control and audit over the annual accounts by the Oversight Bodies is still scarcely "out of the egg".

4.3.2.6 Political factors

A number of studies emphasized and examined the political factors associated with governmental financial disclosure. The often occurring idea is that political competition is positively related to financial disclosure. The opposition has a strong incentive to monitor the ruling political parties by means of annual reports aiming at winning votes in the next elections¹³⁷.

These political factors were mostly operationalised by

¹³⁷ "The impact of political competition will manifest in pressures placed on the political structures to disclose accounting information." (Cheng JAPP 1992, p. 9).

measuring the political competition albeit with different findings and different degrees of success (Ingram JAR 1984; Baber JAE 1983; Baber & Sen JAR 1984; Evans & Patton JAR 1987; Giroux JAPP 1989; Carpenter & Feroz AH 1990; Cheng JAPP 1992).

Similar research was done without focusing on the political factors such as Magann 1983; Evans & Patton JAE 1983; Ingram & DeJong JAPP 1987).

In the Netherlands Volmer (1992) posited that left wing ruling parties encourage the extent of disclosure according to their care for the weaker social status. This political hypothesis could not be proven (see also 4.3.2.3.3 *Municipal wealth* above).

For the Flemish municipalities there are serious reasons to believe that the awareness of the political participants is at this time too weak or unexistant to put accounting practices and disclosure on their agenda. The consequences of the accounting outcomes which are limited in respect of budgetary repercussions are not yet known or perceived as being important. Within a few years this topic of the political factors could become more interesting for further research. Therefore, the political factors are not further considered in the present study.

4.3.2.7 Creative compliance

Creative accounting intends to "manage" financial disclosure in compliance with prescribed regulations and to escape sanctions. One of the rather scarce examples in a business context was the study of Shah (AOS 1996) tracing the process through which creative accounting output is developed. Up to now creative governmental accounting research is almost non-existent although it will become an important issue. The manipulation mechanisms and consequences of fulfilling the letter of rules, but disregarding the principles would be an interesting topic for future governmental research.

The applicable elements of the *compliance index* are summarised in the next table.

Table 4.2: Possible determinants of the compliance index

Factor	Concept/Construct	Surrogate
1. Tradition	A. Experience	1/ Experienced
2. External influence	B. Accounting and auditing relationships	2/ Related parties 3/ Consultants' support
	C. Engagement	4/ Regional Treasurer
3. Management incentives	D. Professionalism accounting staff	5/ Level of education 6/ Membership professional institutions 7/ Business experience 8/ Training per person
	E. Reliance on debt	9/ Long-term debt per capita
	F. Municipality wealth	10/ Own revenue per capita
	G. Municipal size	11/ Population

4.4 HARMONISATION, COMPARABILITY

4.4.1 Importance - relevance

In the profit-sector comparability has always been a respected issue. Ball & Foster (JAR 1982, p. 173-174) consider the Fair presentation/Comparability as one of the six points of view in accounting method choice positing that: "an important factor in accounting method choice is interfirm or interperiod comparability".

In the governmental sector this issue is also highly appreciated. Comparability defined as consistency among municipalities and as consistency over the years is qualified as an important user need perception (CICA 1980a, p. 31).

The standardisation of governmental accounting and reporting methods is considered to be an important means to improve the consistency and comparability of governmental accounting outputs (Lin, Baxter & Murphy FAM 1993, p. 236).

Comparability and its improvement was an important issue in the 1985 reform in the Netherlands. Faber & de Jong (1988, p. 13-14) complained that the comparability between municipalities was of a poor standard due to a lack of factual follow-up of correct classification and due to valuation problems in that expenditures for acquiring fixed assets were in a number of cases charged in P/L.

Generally one could argue that governmental entities normally experience more problems with comparability since their obligatory services are so numerous and so diverse (Jones & Pendlebury ABR 1982, p. 130). Consequently, uniformity or rigid prescriptions of principles are even more difficult to achieve than in the private sector where the diversity is less and more manageable.

Comparability is relevant to compliance with regulations, for

user need applications, for management control applications, as well as in the light of aggregating national figures.

4.4.2 Definition

Generally Van der Tas (ABR 1988, p. 158; EAR 1992, p. 70) distinguishes between a material harmony and a formal harmony. Formal harmony can be defined as the level of differing financial reporting standards from one country to another. The degree of differing of the financial reports themselves in a certain environment is called material harmony.

Another distinction proposed by Van der Tas (ABR 1988, p. 158; EAR 1992, p. 71) and belonging to material harmonisation are measurement issues vs. disclosure issues.

Measurement issues comprise selection between alternative accounting methods of recognition, valuation and estimation. Disclosure issues (Van der Tas EAR 1992, p. 71) concern the extent of and detail according to which data are provided in the annual reports in which the presentation is the main issue.

The studies concerning harmonisation are mainly concentrated on the issues of measurement. The components of measurement issues are further specified by Christiansen (1995, p. 7) as consisting of recognition criteria vs. measurement and estimation methods.

This study proposes to enlarge this distinction more completely, referring to the accounting assertions: completeness, realness, ownership, valuation, cut-off, classification, mechanical accuracy, disclosure. An overview is presented in the section 4.1 EXTENT OF COMPLIANCE.

Referring to RQ4 the above assertions can be the origin of different accounting practices and methods each being of

consequence to the extent of comparability¹³⁸.

The annual accounts of two municipalities are **comparable** with respect to one specific event if this event is recorded in the same way in both the annual accounts under the same circumstances (Van der Tas ABR 1988, p. 158). A different recording is permitted as long as a translation or reconciliation to the criteria used in the other accounts is possible. Van der Tas calls it 'multiple reporting' meaning that additional information is disclosed based on an alternative accounting method¹³⁹.

¹³⁸ Comparability and harmony are often used as synonyms whereas harmonisation is rather the process of achieving an improvement in comparability (Van der Tas ABR, p. 158).

¹³⁹ Such "multiple reporting" exists in Belgium for banks and insurances providing an accounting output for the public next to a more detailed and in some respect differing reporting to the Oversight Bodies.

4.4.3 Development

The present study will concentrate on the material *de facto* comparability covering measurement issues as well as disclosure issues.

In general the comparability approach can be structured as shown in table 4.3.

Table 4.3: Comparability approach

Approach	Type A	Type B	Type C
Rules	Compulsory, defined by NARGC	To be selected from options predefined by NARGC	Not foreseen by NARGC
Problems of compara- bility when:	differences between practical "have done" and theoretical "should do"	differences within practical choices	differences within practices

The examined comparability elements of the types A and B will be discussed in the section reporting the findings considering RQ1 and RQ2.

Comparability Type C elements are examined and presented in the section considering RQ4.

4.4.4 Operationalising the comparability

4.4.4.1 Type A: *De facto* distortions from rules

In principal each municipality should adopt the same NARGC rule, but in practice inconsistencies and disconformities can occur.

4.4.4.1.1 *Starting value*

As for the starting value, NARGC has prohibited the first valuation on 1st Jan. 1995 of a number of assets¹⁴⁰ even if they existed importantly on 1st Jan. 1995.

Two kinds of possibilities can occur leading to disharmony.

- * Firstly, there is the problem of municipalities having "illegally" recorded and disclosed such natures of assets in their first drawing up on 1st Jan. 1995.

- * Secondly, municipalities which started before 1995 could have purchased those kinds of assets in their second or third or fourth year thus resulting in a balance sheet value as of 1st Jan. 1995. Therefore, it is normal that pilot-municipalities will show differences compared to the others. They have indeed had the time to record the acquiring of assets during their "pilot" years.

4.4.4.1.2 *Starting year of depreciations*

When entering the fixed assets in the accounting software in drawing up the first balance sheet 1st Jan. 1995, one has to put in the date of acquisition of the asset in question.

¹⁴⁰ See section 4.1 EXTENT OF COMPLIANCE.

Depending on this date the system will automatically calculate backwards an estimated discounted initial value. Consequently, this initial amount will be revaluated and depreciated over the past lifetime resulting in the current net book value as of 1st Jan. 1995.

The crucial point is that this net book value is going to be revaluated and depreciated over the remaining lifetime.

Therefore, the selection of the original date strongly influences the number of years over which the current net book value will be spread. In other words, choosing another date of acquisition results in allocating the current net book value over another number of years.

A fictitious example may clarify this technical issue:

Suppose a municipality has an administrative building with an estimated value of 20 mio BEF and which was built in 1960.

After calculating backwards a discounted initial value of 6 mio BEF appears. More important is that the building is going to last for the coming 15 years (= legal defined lifetime 50 years - past 35 years of depreciation). Starting on 31st Dec. 1995 this building is going to be firstly revaluated according to the revaluation rate for 1995 and then depreciated for 1/35th, and so on.

Fig. 7: Years of depreciation

The current net book value of 20 mio BEF will be allocated by depreciation over the coming 15 years. Positing that the acquisition date was actually 1970 means that the same 20 mio will be depreciated over 25

years.

In the worst case certain used buildings or other fixed depreciable assets are principally not recorded in principle if their date of acquisition precedes the legal lifetime, which for buildings is 50 years (*RD 2nd August 1990 modified by RD 24th May 1994*). This kind of regulation is difficult to understand and to approve of since the aim of the accounting reform was to make the financial picture more clear and transparent.

The harmony comes under fire because the date of acquisition is not easily determinable and thus depends on the arbitrariness of those persons responsible.

Particularly for buildings (e.g. the Town Hall) there is often no exact acquisition date: the building is periodically maintained, now and then there are replacements of parts of the building combined with an enlargement, etc. It is quite obvious that defining the acquisition date is often a matter of agreement or convention by the municipal Executives.

It is reasonable to assume that not all municipalities determine their acquisition date in the same manner. This kind of concept is very difficult to capture empirically, but remains nevertheless an important point of departure.

4.4.4.1.3 *Fixed assets movements schedule*

The fixed assets movements schedule is legally defined and commented above in the section 4.1 EXTENT OF COMPLIANCE.

The schedule is deemed comparable if it is in compliance with the legal definition (*Circular Letter BA/FB 96/3*).

It is noteworthy to mention that schedules which are globalised (i.e. not per nature) do not seem to contribute to accountability. They are interesting but they are not at all

comparable since the details to compare can only be guessed at.

Another problem is the disclosure of the cumulated depreciations and revaluations without showing the movements of the year. This renders such seemingly interesting figures uncomparable to the detailed figures of others.

Of course the lay-out as such, portrait or landscape, lines or other shapes, etc. are factual differences which are assumed not to have any repercussions on the comparability. Perfectionists could be severe by also imposing identical forms of schedules.

4.4.4.1.4 Valuation investments

a) Shares Gemeentekrediet

Identical shares of the same entity acquired on the same date and under the same conditions should be recorded at the same unit value.

If one agrees with this principle, then the shares Gemeentekrediet of which every municipality is a shareholder should be valued using identical unit values.

However, different defensible valuation principles may occur. For example, the necessary identical unit value is interpreted as:

- the historical nominal value (originally called up share capital divided by the number of shares) which was meanwhile adapted due to incorporation of reserves in the capital a number of years ago;
- the current nominal unit value per share (current called up capital divided by the number of shares)
- the current intrinsic value (capital and reserves divided by the number of shares).

The accounting regulations are not precise enough; consequently, municipalities can be in compliance with the unprecise regulations without being consistently comparable.

Empirical data will be drawn from the responses on question II-4.

b) Other investments

Also for the other investments a comparison of the applied valuation methods is feasible, although not every municipality is a shareholder in exactly the same entities or enterprises. In addition to this, it may happen that different municipalities have acquired shares at different points in time and under different price conditions which would justify an possible unit price differences. On the other hand, the trade in shares of intermunicipal organisations is not at all and frequently used as in a financial business environment. Mostly, municipalities acquire the shares once under the same conditions as for other governmental shareholders and they hold the shares for years.

The data will be gathered from the annual accounts; it is of course impossible to assess the level of unit-price comparability if the Notes do not disclose details of investments or if unit prices are not disclosed.

4.4.4.1.5 Stocks

As was the case in the previous concepts, the study also supposes that each municipality disposes of stocks.

A preliminary study (Christiaens 1996a) revealed that municipalities are not keen on recording stocks.

4.4.4.1.6 Accruals/deferrals

The study assumes that all municipalities are actually encountering accruals and deferrals. The question whether or not these are recorded as such becomes important in the light of comparing municipalities.

In this study municipalities are divided according to those having disclosed at least one of the accrual and deferral items vs. those having disclosed not any accrual or deferral.

Two remarks can be formulated. *Firstly*, the possibility exists that there are yet municipalities with no accruals/deferrals at all (e.g. small municipalities) because e.g. they have adapted their purchase management. *Secondly*, the fact that accruals and deferrals have been recorded is not sufficient to be able to conclude comparability. It is possible that accruals and deferrals are entered but not for the correct amounts.

The first remark should not be accepted since it is very unlikely not to have any accruals or deferrals. Moreover, if the purchase management is being adapted then it is obvious that comparing municipalities is no longer possible.

The second remark is difficult to refute. But it will enforce the conclusions rather than weakening them. In other words, the conclusions of the examination will only be more absolute.

4.4.4.1.7 Pension provisions

Contrary to business enterprises, municipalities have the right to finance autonomously their pension obligations. A preliminary study (Christiaens 1996a) revealed that municipalities do not intend to disclose their pension provisions.

Apart from an incomplete and incorrect balance sheet disclosure such a situation precludes a comparison with other

municipalities having no pension obligations.

4.4.4.1.8 Different "cut-off" practices

The problem of "cut-off" is traditionally underestimated in governmental accounting¹⁴¹. Due to the specific normative relationship to budgetary accounting and the specific governmental issues this "cut-off" problem is even more apparent.

To enable an adequate comparison of balance sheets and P/L accounts these statements should be cut off based on the same principles. This kind of question will be dealt with by focusing on one of the most important areas, namely on the group of accounts *61X Services and other goods*. It is obvious that every municipalities has to deal with this account.

Data will be provided by question II-6 of the Questionnaire.

4.4.4.1.9 Contingencies

It is obvious that where contingencies are concerned municipalities can only be compared if these off-balance sheet rights and commitments are disclosed in a similar way. Each municipality is faced with contingencies.

¹⁴¹ In business accounting also the problem of "cut-off" is often more difficult and less a routine task for the bookkeepers though there are supporting tax criteria to reinforce consistent accounting procedures. It is mainly in the financial auditing sector that the skill of handling "cut-off" is available.

4.4.4.2 Type B: Options available

4.4.4.2.1 Valuation of II.C. Road networks

Concerning the initial valuation on 1st Jan. 1995 of the natures 235 Sewers, 236 Waterpipes, 237 Other public utility networks, two different valuation rules are allowed, one of which has to be consequently adopted (art. 1 MD 30th Oct. 1990 modified by MD 1st Feb. 1994):

- production cost,
- current unit price per m in respect to the type * number of meters network

Since these options can be selected unconditionally an interesting question arises as to how and to which extent these options are selected in practice.

4.4.4.2.2 Estimation instead of valuation

Instead of adopting the preferred legal valuation rules, a municipality may also decide to carry out an estimation if the preferred legal rule does not provide a realistic view of the current value. This choice, which has to be officially decided on and has to be registered is applicable to the following items:

- II. Immovable patrimony
 - II.A. Vacant land (except for nature 207 Timber on the tree)
 - II.B. Buildings and their respective premises (except for nature 218 Non-valued buildings without specific destiny and monuments on the beginning balance sheet)
 - II.C. Roads (except for the natures 233 Metalling, 235 Sewers, 236 Waterpipes, 237 Other public utility pipes)
 - II.D. Construction works
 - II.E. Watercourses and reservoirs
 - II.G Various immovable patrimony
- V. Miscellaneous movable patrimony: Nature 340 Patrimony of art collections

This study concentrates on the most important items and their valuation on 1st Jan. 1995, which are the following natures:

Legal rule

205 Land of parks, gardens, ...	A
211 Land of buildings	B
21x Buildings	C
231 Land of roads	A
241 Land of constructions	A
261 Land of watercourses	A
340 Patrimony of art collections	D

The preferable legal rules (art. 1 MD 30th Oct. 1990 modified by MD 1st Feb. 1994) are:

A = a valuation based on the real estate tax rate ($100\text{m}^2 = 1$ Opc)

B = a valuation which equals $15\% * \text{Cadastral Revenues} * 30$

C = a valuation at acquisition/construction value

D = a valuation at insurance value

The alternative valuation rule is in all cases an **estimation**. This alternative rule is actually made **conditional**, namely when the preferable legal rule is not giving a realistic view of the current value (art. 2 MD 30th Oct. 1990 modified by MD 1st Feb. 1994).

Consequently, the different valuation methods as well as their variants will be explored and described in order to test the extent of comparability.

The data are drawn from the annual accounts and more particularly from the first balance sheet 1st Jan. 1995.

4.4.4.2.3 Lifetime of equipment and extraordinary maintenance

The depreciation rules (Appendix MD 2nd Aug. 1990 modified by MD 24th May 1994) of any fixed asset are all legally defined except for the following items (art. 1 MD 30th Oct. 1990 modified by MD 1st Feb. 1994):

II.A. Vacant land: equipment, extraordinary maintenance and depreciable plantings: **max. 15 years**

II.B. Buildings and their premises: equipment and extraordinary maintenance: **max. 15 years**

II.C. Roads (except for nature 233 Metalling): extraordinary maintenance and depreciable plantings: **max. 15 years**

II.D. Construction works: extraordinary maintenance: **max. 15 years**

II.E. Watercourses: extraordinary maintenance: **max. 15 years**

III.C. Transport equipment (except for nature 321 Bicycles, motorcycles): extraordinary maintenance: **max. 5 years**

IV. Machinery and equipment: extraordinary maintenance: **max. 5 years**

Each municipality encountering these items can make an arbitrary choice within the legally defined range.

Although interesting with respect to assessing the level of sensitivity towards the rates of depreciation, this subject will not be examined any further in the present study. Much depends on the availability of the data which is rather limited. Looking at the clarity in the valuation rules in a pretesting study (Christiaens 1996a) it appears to be difficult to capture the inherent applied rates. Most of the municipalities are not disclosing this kind of information in their annual accounts.

In addition, some municipalities could have registered these maintenance costs directly in P/L or on the account for the definite asset. Such accounting extremes cannot be measured in this study either.

Nevertheless, since such legally defined options are of interest in the light of earnings management and creative accounting, it would be an interesting subject for further research.

4.4.4.2.4 Lifetime of allowed investment subsidies in capital

In analogy with the previous items the allocation rules of VII. Allowed investment subsidies in capital over a number of years can be selected arbitrarily limited to a maximum number of 10 years.

Even this maximum number of 10 years can exceptionally be overruled as long as the Municipal Council can motivate the allocation over a longer lifetime.

4.4.4.3 Type C: Varying accounting practices

Theoretically and legally, all accounting practices seem to fit and seem to be regulated very well since municipalities do not have much freedom in choosing among accounting methods, they just have to comply with the prescribed regulations.

However, in practice municipalities actually have a lot of freedom given the lack of definition of an accounting framework, the somewhat formalistic prescriptions preventing feed-back from practice, the lack of professional audit, the lack of a standard-setting body which deals with practical municipal accounting problems.

4.4.4.3.1 Level of *de minimis*

A first interesting issue which is not well regulated is the so-called *de minimis* practice. The major question is here as to how acquisitions in fixed assets are distinguished from P/L items.

Amongst other issues this item was treated in a study by Allen (CIGAR 1995) by means of a survey in UK local governments.

The current Statements of Recommended Practices (SORP) on local authorities accounting had then just replaced the "debt charge accounting system"¹⁴² replaced by a commercial accounting system¹⁴³. His preliminary sample revealed that the *de minimis* level of assets, although very difficult to measure, strongly varies which obviously affects comparability.

In Belgium Redant (1995) devoted some attention to this topic

¹⁴² This system represents capital accounting in function of the kind of financing.

¹⁴³ This system which is in line with GAAP implies the recording of capital assets and depreciation in function of their lifetime irrespective of their way of financing.

and found that no adequate guidelines are available. As a consequence there is a lot of variety of applied rules. The amount 15,000 BEF as the limit is cited a number of times, but the approach remains arbitrary and circumstantial). Neither the disclosure nor the choice of a fixed level is strictly imposed by NARGC. Nevertheless this item is interesting from the point of view of comparable reporting.

The accounting practices regarding *de minimis* are asked for in the questionnaire (Question II-5) and the study of course attempts to obtain information from the annual accounts to measure the extent of clarification in the Notes.

4.4.4.3.2 Prepayments on dividends

A lot of municipalities usually receive advances on dividends¹⁴⁴ from intermunicipal organisations or other related parties. These prepayments are meant as a financial support for the municipality, so that they do not have to wait for the whole dividend until the next year.

This topic can be debated a lot, namely should the prepayment be recognised as a P/L effect or not?

No matter what accounting practice is preferred, the preliminary study (Christiaens 1996b) revealed that some municipalities are recording the prepayments directly in P/L whereas others are deferring the profit effect. Consequently, these two groups become inconsistent and uncomparable to a certain extent. Even within the municipalities which defer the profit effect different disclosure practices may occur as to the kind of liability the deferral is registered on.

Data will be drawn from question II-8 of the Questionnaire.

¹⁴⁴ These prepayments on dividends should not be mixed up with other kinds of payments from intermunicipal organisations such as certain revenues for renting offices, redemption of loans, etc.

4.4.5 Validity checks and limitations

The approach in studying the comparability issue is cross-sectional, not longitudinal. One might argue that conclusions about comparability are not valid in time. In other words, one might argue that the casual cross-sectional differences which are implying comparability problems are due to the novelty of the reform. The reform would restore itself and the eventual problems would be automatically resolved after a few years.

In order to cope with this external validity threat the experienced municipalities are going to play an important role as they have already been working for a few years with the reformed accounting system. The level of their comparability will be an interesting test of this threat.

Chapter 5: Previous research

This section on previous research is structured as follows. Firstly, a brief international overview of doctoral dissertations concerning governmental accounting research is presented.

The second part explores the prior studies in a more general way. The central theme are the governmental annual reports; they are the angle from which the previous research is classified. A number of studies concentrate on topics which precede the realisation of annual reports. Other studies aim at examining the effects and uses of the annual reports. The overview of prior research will somehow be limited to local or state governments. Research in nationalised industries, public institutional systems like health care and research in NFPOs is principally not covered. It is not the intention to analyse the prior research methodologies¹⁴⁵ and to reach an appraisal. The overview is intended to give insight in what consists of public sector accounting research.

Finally, the third part analyses the existing studies which are in the spectrum of the present study.

5.1 OVERVIEW INTERNATIONAL DOCTORAL DISSERTATIONS

The overview reported in table 5.1 is based on the Dissertations Abstracts A: International Abstracts and C: European Abstracts for the periods: 1976 (Vol. 37) - June 1990 (Vol. 50)¹⁴⁶; 1993 - 1994.

The selected scope was Public sector accounting within the key-items: "business administration, accounting".

¹⁴⁵ For a methodological review of public sector accounting research see Broadbent & Guthrie AAAJ 1992.

¹⁴⁶ The data for the periods July 1990 till December 1992 were not available.

The dissertations matching these criteria were selected and classified according to the "topical interests" defined by the American Accounting Association (AAA): Government and Nonprofit Section (Membership Directory 1995-1996).

Table 5.1: Number of doctoral dissertations

TOPICAL INTERESTS	1976-90 American	1976-90 European	1993-94 American	1993-94 European
Financial Reporting	21	-	2	-
Measurement Focus/ Basis of accounting	1	-	-	-
External Auditing	12	-	-	-
Internal Auditing	5	-	-	-
Managerial/Cost	5	1	2	-
Budgeting	8	3	3	-
Taxation	-	-	-	-
International	-	-	-	-
Financial Management	2	-	1	-
Education	-	-	-	-
Conceptual Framework	2	-	-	-
Standards-Setting Process	6	-	-	-
Reporting Entity	2	-	-	-
Pensions	1	-	-	-
Capital Assets	1	-	1	-
Depreciation	1	-	-	-
Municipal Bonds	11	-	-	-
Risk Management	-	-	-	-
Service Efforts and Accomplishments	-	-	1	-
Popular Reporting	-	-	-	-
Business Type	2	-	-	-
Activities	-	-	-	-
Cash-flow Reporting	-	-	-	-
Total	80	4	10	0

The numbers in the overview represent the subjects covered; some dissertations consist of more than one subject.

Apparently, the preferenced topics were financial reporting, external auditing and financial market influence in governments. In the long range of years the European dissertation on governmental accounting appeared to be very small in numbers.

5.2 PREVIOUS GOVERNMENTAL ACCOUNTING RESEARCH

5.2.1 Explanation of the accounting reform

The central theory attempting to explain governmental accounting reform mostly towards business-like accrual accounting is the "Contingency theory" of K. Lüder developed in 1990.

This theory is almost the only one which succeeds in presenting a theoretical, contextual explanation for governmental accounting reforms. It is more extensively discussed in the section Chapter 2, 2.5 UNDERLYING THEORIES.

A few years before the "Contingency theory" became known, Bergevärn & Olson (AAAJ 1989) presented a theory explaining a reform process in Swedish municipal accounting. Basically starting from a historical examination the change of the accounting norms were due to conflicts with a dominating "myth" (p. 36). The development of a new "myth" in a contextual process was supposed to create new norms. Apparently, some correspondences exist with the contingency theory in that this theory also starts from a kind of problem situation.

"Regain legitimacy" was set forward by Carpenter & Feroz (AOS 1992) as a factor to explain a change of accounting system in the city of New York from cash accounting to business-like accrual accounting. This kind of reform is seen as a facelift in order to deny the bad financial situation of the city. The decision to adopt GAAP was based on a desire for legitimacy. A more accurate financial accounting system and the desire for comparability with other states were also factors taken in consideration.

Another example of "legitimation" as an explanation for public sector reform can be found in Kaidonis' paper (EIASM 1995) considering the reform in the South Australian Housing Trust (= SAHT). Kaidonis attempts to show that for the case of SAHT accountability and managerialism are not only used as a

legitimising tool for public sector reform but also serve to dictate the structure of the organisation. She concludes that the reform has the potential to destroy the existing effectiveness of the organisation SAHT.

The influence of political competition on the decision to adopt GAAP was studied by Carpenter (JAPP 1991). She distinguished 3 forms of political competition: electoral competition, parliamentary competition and interest group competition. In her study the 3 forms of competition revealed a significant impact on the decision whether or not to adopt GAAP.

5.2.2 Conceptual framework

5.2.2.1 Generally

There is a lot of literature on the conceptual framework of public sector accounting.

The purpose of the conceptual framework theme is to know what the objectives and output of an accounting system are and how these objectives can be met conceptually.

Paraphrasing Mayston's idea (FAM 1992, p. 227) the principal role for a conceptual accounting and reporting framework is identifying the relevant questions, identifying relevant accounting answers and making the right connections.

Important questions to raise in the conceptual framework are:

- For whom is the accounting information intended?
- For which purpose is the accounting information meant?

Is it for:

- * monitoring (principal-agent) (Mayston FAM 1992, p. 235)?
- * decision making?
- * meeting user needs?
- * discharging responsibility of the mandated?

The conceptual framework research is studying and examining these needs and questions resulting in norms, principles, standards and regulations on accounting methods, accounting practices, reporting and disclosure.

A special issue of the journal *Financial Accountability & Management* 1992 Vol. 8, No. 4 was completely devoted to the conceptual framework for public financial reporting. Mayston (FAM 1992) concentrated on how one should account for capital assets and their funding setting forward 9 relevant questions. These questions addressed items such as depreciation, asset management, current cost information, capital maintenance, allocation over budgets, value for money, ...

Jones (FAM 1992) provided a review of earlier conceptual frameworks and addressed the user need point of view, which was also the main issue of Rutherford (FAM 1992). Mainly from the angle of forms and the extent of disclosure Lapsley (FAM 1992) examined and compared the financial reporting framework for local authorities and the National Health Service. He distinguishes the so-called *deductive studies of user need frameworks* and the *field studies*. This last group could also be called user need research and is covered below. Lastly Vass (FAM 1992) reflected some conceptual framework issues for regulated industries. He suggests to improve the accountability by encouraging more public disclosure and by creating the need for audit (FAM 1992, p. 314).

5.2.2.2 Conceptual framework fixed assets

Referring to Mayston's central theme, there are also several other studies covering the broad issue of **capital assets in the public sector**.

Apart from studies focusing on the standards and accounting methods in one country or jurisdiction like Taylor (FAM 1989), an important source of concepts, natures and ideas of public sector (fixed) assets can be found in the work of Pallot (AH 1990; AAAJ 1992). She made a pertinent analysis of the concept of (fixed) assets and the distinction from the profit-sector¹⁴⁷. As confirmed by Pallot in response to Mautz, a number of properties such as monuments and roads could innovatively be viewed as liabilities rather than assets (Pallot AH 1990, p. 79)¹⁴⁸.

The traditional debates and discussions considering the accounting for fixed assets have been treated again and again

¹⁴⁷ See Chapter 12, 12.3 COMMUNITY ASSETS.

¹⁴⁸ The very same idea was mentioned by an interviewee. The obligatory maintenance, providing of services and keeping up the capacity of several capital assets create necessary provisions rather than representing assets.

in different studies. The debates often take place in a deductive, normative manner and mostly deal with:

- recognition to be valued and disclosed (Leonard 1985; Mayston FAM 1992; Aiken FAM 1994);
- current cost accounting - historical cost (Leonard 1985; Parkes FAM 1989; Taylor FAM 1989; Aiken FAM 1994);
- method of depreciation (Jones FAM 1985; Engstrom 1985; Taylor FAM 1989, Mayston FAM 1992).

Looking at the topics considered in the recent CIGAR 6 Conference on local government accounting, the issue "fixed asset accounting" still has a tremendous influence. Lapsley & Pallot (CIGAR 1997) reported on a comparative study in capital accounting in the UK - New Zealand referring to the continuing debate on how capital accounting practices should be reformed (p. 3). Cheng & Harris (CIGAR 1997) proposed a model of reporting on capital assets with a dual purpose. One result is an entity-wide reporting in which assets are treated as in the private sector; the other result is reporting at fund-level without disclosing capital assets nor depreciations.

The Belgian accounting standard-setter seems never to have heard of the different international views and variety of concepts regarding governmental fixed assets. One could argue that this inadequacy results in heavy accounting adoption difficulties and weaknesses on the use and comparability of the accounting output.

Conceptual framework research rather studies standard-setting in a theoretical, normative manner ("how accounting should be") and less empirically based ("how accounting is done"). In Belgium framework research is in general less developed because the legislator takes over the conceptual thinking.

5.2.3 Socio-economic-political factors

A number of studies concentrate on socio-economic-political factors that influence accounting principles, accounting methods and practices.

Allmost all studies falling under this heading are in the spectrum of the present study and they are analysed and discussed in the next section¹⁴⁹.

Those studies which examine amongst others political factors toward accounting practices presume that the incentives to use municipal accounting practices are derived from the relationship between elected officials and voters/constituents.

On the other hand Baber (JAPP 1990) addressed the incentives of elected officials to use municipal accounting practices presuming that these incentives derive from the relationships between elected officials and their prospective competitors.

Chase & Coffman (JAE 1994) examined the endowment investment accounting method in schools and universities in the light of the positive accounting theory of Watts & Zimmerman (1990). The type of institution (private or public), the endowment size and return appeared to be associated with the voluntary decision to apply the fair market value instead of recording the endowment at cost value. Their third factor namely debt covenants was not convincing.

¹⁴⁹ See 5.3 OVERVIEW OF PREVIOUS ACCOUNTING PRACTICE RESEARCH.

5.2.4 Management accounting

In a changing perspective Lapsley & Pettigrew (FAM 1994) looked at the transferability of private sector management accounting to the public sector. In an exploratory way Likierman (FAM 1994) examined a number of considerations regarding management accounting in the UK central government.

Governmental studies linking the financial accounting system to the management accounting system in a practical way are scarce. Yet, an example is the study of Gordon & Sellers (JAPP 1984). By means of an experiment they investigated the compatibility between a governmental financial accounting system and the budgeting system. Their research revealed that the usefulness of a budgeting system depends on the design (i.e. the being "geared" to the budgeting system) and availability of the financial accounting system.

5.2.5 Budgeting

Until recently, Australian municipalities used a mandatory fund accounting system with a broad functional or purpose classification expenditure approach. After the abolishment of that mandatory system, municipalities looked at the approach of program budgeting (PPBS); a few municipalities had already experimented with this kind of budgeting.

Bellamy & Kluvers (FAM 1995) concentrated on the PPBS topic and investigated the extent of current usage of program budgeting (PPBS). Based on case-studies and on a survey they examined municipalities concerning the reasons why they adopted programme budgeting or why they were opposed to it. They also tried to see how the system was implemented and what consequences evolved from it.

This kind of research focuses on a reform from budgetary fund accounting to program budgeting and gathers information about the implementation or resistance and the consequences.

5.2.6 Financial management

Sharp & Ingram (JAPP 1989) attempted to determine whether the use of internal service funds and their kind of accounting in municipalities affects financial ratios. They also looked at the comparability of reported expenditures between municipalities using internal service funds and municipalities that do not use those funds. Comparability was not measured by counting attributes as in the typical comparability literature¹⁵⁰ but it was rather expressed by the variabilities of the reported expenditures in time. Their study was succesful and they formulated suggestions to the GASB standard-setters.

The effect of accounting disclosure and auditing controls on the effectiveness of control systems measured by the level of municipal expenditures was examined with mixed results by Giroux & Shields (JAPP 1993). They posit that "accounting regulations potentially limit the monopoly power of bureaucrats over information." (p. 257). This manadatory conformance to GAAP together with audit procedures is esteemed to provide control procedures and to limit the manipulation by bureaucrats. However, the factual implementation of the regulations and the possible creative accounting even when an audit is being conducted, are not sufficiently stressed and checked.

¹⁵⁰ See Van der Tas (ABR 1988) .

5.2.7 Capital asset management and investment decisions

The impact of the awareness of depreciations on reinvestment was investigated by Kachelmeier & Granof (JAPP 1993) in an analytical research. They asked themselves whether depreciation information was used in the internal decision-making process. Their experiment revealed that depreciation information is considered to be a substitute for historical details of past expenditures. In spite of the discussible importance of disclosing depreciations in external reporting, decisions of internal executives appeared to be significantly affected (p. 320).

A second analytical research (Kwong JAPP 1994) concentrated on the theorem that accrual accounting is superior to cash accounting because accrual fully reflects the managerial decisions over a period (p. 268). The author posits that "accrual accounting information should be more useful than cash basis accounting information for both motivating managers to expend efforts..." (p. 268). A theoretical model in a agency setting proofs his hypothesized dominance. However, there are some problems with the external validity of this theoretical approach. *Firstly*, considering accrual vs. cash dichotomously is a too simple a reflection of reality: there are a lot of situations in between. Moreover, in reality assertions that are accrual-minded are combined with others which can remain cash-minded. *Secondly*, Kwong did not take into account the factors which make noise and disturb (e.g. management intentions without looking at accounting information). Such factors are sometimes dominating in practice. *Thirdly*, the approach is pure technical neglecting contextual factors.

The study of Sharp (JAPP 1985) explored the effects of alternative municipal accounting practices on capital asset acquisition decisions. A theoretical "expenditure model" and a "depreciation model" were developed and preliminary tested in

three case-studies with prosperous results, although further investigation and expansion of the decision making model was proposed.

5.2.8 The use of accounting information for pricing decisions

Pricing decisions can be seen from an external point of view, i.e. the pricing of goods and services to clients or citizens, as well as from an internal, managerial point of view such as transfer-pricing or charging.

The use of (management) accounting information for external pricing decisions in local authorities in the UK was examined by Pendlebury (FAM 1994). By virtue of the Local Government Act 1988, the defined activities of "direct service organisations (DSOs)" have to be organised as separate economic units and they can tender for jobs in competition with profit sector enterprises. Examples of DSOs belonging to the local government are: cleaning services, catering services, etc.

The pricing of these services will be necessary and comparisons with business enterprises can be made. Pendlebury examined the possibilities of (management) accounting in delivering and supporting "pricing information". He found that this kind of accounting information was less developed in the two local governments he surveyed.

Concerning internal pricing decisions, Heald & Scott (FAM 1995) examined the use of newly generated capital accounting information for competitive charging systems in the public health sector. Their purpose was to evaluate the implementation of capital charges established in the NHS Scotland.

Secondly, an evaluation was made of the intellectual coherence of the adopted system. The practical difficulties of implementation affecting the health program and the NHS itself were also discussed. Heald and Scott concluded that capital charging leads to positive benefits in that there is a greater efficiency in the utilisation of capital facilities. However, disadvantages can occur due to wrong or misunderstood incentives of the capital charging system.

They admit that there still is a lack of sufficient empirical fieldwork and therefore they remain cautious in their conclusions.

5.2.9 Performance indicators

Measuring performance indicators which can also be called service efforts and accomplishments¹⁵¹ implies questions such as:

- What is the effect of a municipal service rendered?
- Are the interest groups satisfied with the accomplishments?

One way of measuring the performance or the accomplishments can be found in accounting systems. Accounting information provides figures and numbers to measure the performance of governmental units in terms of effectiveness and efficiency. It is noteworthy to mention that this kind of accounting information is mostly input-oriented, not output-oriented, which means that inputs are measured in terms of costs or expenditures, but outputs cannot be measured monetarily.

Another way is the development of non-financial measures of government performance to quantify the quality of the services that are supplied to the citizens.

Problems in measuring performance indicators:

- 1/ As there is no automatic regulation of the quality of services due to the lack of economic pricing mechanisms in a municipality, there is a need for specific performance indicators. It is interesting to investigate whether the accounting system can deliver any answer for this problem. Charnes and Cooper (AOS 1980 p. 89) who developed a measure of efficiency for NFPOs formulate the problem in this way: "... the private enterprise sector already has a measure, viz., **net profit**, which simultaneously accomodates both the effectiveness and efficiency components...". (emphasis added)

¹⁵¹ Service efforts and accomplishments, Concepts Statement No. 2, GASB 1994.

2/ There are no generally agreed standards or norms to measure effectiveness and efficiency; frameworks and standards are actually not defined (Pugh FAM 1988, p. 59).

In 1985 Sharp & Ingram (Research in governmental and non-profit accounting) gave a presentation and an analysis of the objectives of accounting and financial reporting as set forth in the concept statement of NCGA and FASB. They described accounting and reporting standards for measuring governmental financial performance and potential performance criteria were analysed.

Concerning executive agencies (a total of 59) in the UK, research was done by Pendlebury, Jones & Karbhari (FAM 1994). On the one hand they considered executive agencies established as trading funds with mandatory annual statements of accounts and performance reports. On the other hand they looked at executive agencies of the type "supply-financed" with non-mandatory reporting recommendations.

Based on the annual reports 1992 of the agencies, they firstly examined the extent to which executive agencies have moved from a conventional cash accounting basis to the accrual basis. Secondly, they tried to analyse the use of different types of performance measures and indicators. Indicators were defined as follows:

- * economy: (cost reduction type)
- * effectiveness: (profitability type)
- * efficiency: (unit cost type)

The reporting focused on the external users, not on the internal (i.e. management).

They concluded in their article that:

- * form and content of the annual report are diverse in many respects; this hinders comparability among agencies and comparability with profit sector enterprises.
- * For the agencies there is a variety of accounting

methods: some agencies use historic cost, others use a modified historic cost and current cost accounting also exists.

* Many performance indicators cannot be relied upon, as there is no independent audit-system available.

Finally, they posit that the relevance of the annual reports in achieving the basic goals of improving efficiency and quality of service, is not obvious.

Since a number of years there is a considerable emphasis on measuring and reporting performance in executive agencies in the UK. Hyndman & Anderson (FAM 1995) examined the role of performance information in the discharging of accountability by agencies and the contribution of performance reporting. They drew from the annual reports 1991/1992 of 57 agencies. In a normative way, they argued that an agency has a responsibility to account (accountability) to external citizens, voters, ... (outside the management) and that the annual report is an important means to express this accountability.

Furthermore they argued that wider performance information regarding efficiency and effectiveness is important in discharging accountability.

Their conclusions were that reporting of agencies is very diverse (42% of the number of agencies reported little or nothing concerning efficiency and effectiveness), whereas other agencies did provide information.

In Accounting Horizons 1994, Boger, Carney & Euske tried to find an improvement of the accounting and control system in the department of defense USA by examining its efficacy and efficiency.

Todd & Ramanathan (AR 1994) developed an empirical model to examine the responsiveness to public demand for services, budgetary slack and task complexity in the New York City Police Department (NYPD). The model incorporates efficiency and effectiveness measures. Task complexity and budgetary

slack are seen as important variables in performance assessment. Todd & Ramanathan found that task complexity is an important factor (cost-driver) of budgetary allocations and of effectiveness of the NYPD in achieving specific outcomes.

5.2.10 Accountability, user needs

Accountability in municipal context can be defined as: "... the process/processes by which local authorities are held to account for their resources." (Collins, Keenan, Lapsley 1991, p. 1).

Collins, Keenan & Lapsley (p. 1) proceed by shaping the different forms of accountability¹⁵²:

- a) obligation to provide financial information (budgetary - ex ante as well as accounting - ex post) for the public and for interested persons;
- b) obligatory subjected to external audit;
- c) explanation and motivation of budget proposals by ruling party to the city-council in the allowed presence of the public and the media;
- d) possible challenge of the ruling party by the opposition;
- e) ruling party will face re-election and will be held accountable to the voters.

Obviously, municipal accounting practices and annual accounts play an important role in accountability. Traditionally, accountability is seen from the point of view of being accountable of probity and legality of spent money. In more recent years, there has been an enlargement of accountability to the proving and ensuring of "*Economy, Effectiveness, Efficiency*" (Lapsley AAJ 1988, p. 30).

The extent to which the annual accounts and financial reporting serve accountability towards users, is examined in the often called "**user need research**". There are several studies in which users and their needs are examined with respect to the annual reports.

¹⁵² These forms are similar in Belgium except for the external audit which does not exist for municipalities. The audit in municipalities is imposed and directed by higher governments and executed by certain governmental institutions such as the "Rekenhof- Cour des comptes" or other functions.

In an empirical examination Jones, Scott, Kimbro & Ingram (GASB 1985) attempted to investigate potential user needs, starting with an identification of potential users. Another subject of their study was the problem fund type of statements or consolidated statements; the former is typical for governments; the latter is derived from businesses. There was a clear preference for the fund type.

Similar exploratory research was performed for governments in Canada. In the study CICA (1980a) the financial reports of Canadian governments were the object of exploratory research together with some descriptive empirical research. For local governments a CICA study group (CICA 1985) tried to define users, their needs and their degree of satisfaction regarding financial reports.

The major issues of the mentioned GASB and CICA studies are:

- the different types and possibilities of accounting techniques, assertions and principles (e.g. full accrual vs modified accrual and cash; consolidated vs. fund type of statements);
- user need research covering the extent to which annual accounts and financial reporting contribute to the accountability towards users, their needs and the degree of satisfaction;
- formulation of recommendations in a normative way concentrated on principles, formats and contents of financial reports.

Daniels & Daniels (JAPP 1991) concentrated on the format of the financial report: "*fund-by-fund statements*" or corporate-type "*consolidated statements*". They attempted to see whether municipal statement format affects:

- a) user perception of adequacy of information;
- b) user belief about best location for information (disclosure in what part of the report, combined with budget or not, etc.);
- c) user ability to determine financial condition of the

municipality;

d) user opinion of overall usefulness of the statements.

They surveyed 3 user groups (legislative/oversight officials, investors/creditors and citizens) and found for a) that changes are necessary or at least desirable. They proposed a scheme (p. 34) covering the 3 types of user groups with their desires. The legislative/oversight officials prefer:

- 1/ "Compliance measures" (budget to actual);
- 2/ "Viability measures" (list largest taxpayers and assessments);
- 3/ "Performance measures" (5-year trend information);
- 4/ "Cost measures" (detail on spending). The citizens prefer a written summary of all previous information, particularly the cost of services, whereas investors/creditors are only interested in viability and performance.

The answers for b) depended highly on the kind of user and his tradition.

Concerning c) the ability to evaluate the financial condition using financial statements, they found that users perceived financial reporting as necessary but not sufficient.

User groups differed significantly in assessing the overall usefulness (d) in making a decision.

In order to explore user perceptions with respect to the forthcoming financial accounting reform¹⁵³ in France, Scheid & Lande (1995) developed an *a priori* survey. Firstly, they asked for the attitudes of Mayor and Executives concerning the accounting changes. Secondly, the perceived usefulness of additional reports such as financial ratios and consolidated figures was questioned as well as the manner of publication. Their responses revealed that these additional disclosures were perceived rather sceptically. In addition, some questions regarding "related parties" and the necessity to include their

¹⁵³ The municipal financial accounting reform (M14) in France was coming into effect on 1st January 1997.

figures in municipal reporting were addressed. A number of suggestions were also made for the future.

As part of his dissertation Volmer (1992) conducted an empirical user need study in the Netherlands based on a similar previous study of Keenan & Lapsley 1988. The study revealed some interesting attitudes. Contrary to the findings in most other user need research where a weak use of the annual accounts is noted, Volmer argues that the actual use is not neglectable. However, it cannot be denied that there is a problem of internal validity: asking the internal users who are executives, to which extent they use the different parts of the annual accounts ("not at all", "briefly" or "thoroughly") inevitably leads to optimistically biased results. This methodological threat could have been prevented by asking indirectly, using disguised questions or by adding additional control-questions.

Another example of a survey question which can methodologically be criticized was directly asking users the level of their understanding ("good", "fairly", "low", "not") of a number of administrative and accounting terms such as "balance sheet", "allocation of costs", etc. Volmer found successful results whereas Collins, Keenan & Lapsley (1991) found that even internal users exhibited only limited to moderate understanding. It is obvious that Volmer's responses suffer from a personal or political bias in answering the understanding and knowledge of those terms.

In the study of Collins, Keenan & Lapsley (1991), user needs regarding annual accounts of Scottish local authorities were examined by addressing 3 main questions:

- 1/ To what extent are annual accounts used?
- 2/ How well is such information understood by the users?
- 3/ What are possible improvements to benefit users?

Based on a previous survey, a model with an identification of the capability to access and use annual accounts, was built. The model consisted of 3 layers of users, viz. external users,

external groups with direct regular access and internal users. This stratification of users (3 layers) with their different points of view and interests was an important progress of this "user need study". The findings varied strongly depending on the kind of user group. Contrary to internal users, there was externally little evidence of substantial use for different reasons.

Regarding the second question, there was only a limited to moderate understanding of governmental accounting practices and of the related controls by central government. Reports and accounts were not perceived as important by the internal users; they rather preferred managerial information such as budget, budget to actual, performance indicators, in spite of the fact that the majority of internal users expressed satisfaction with the quality of the reporting.

Finally, a number of improvements were raised to facilitate the use (p. 37, 38) of reports, such as:

- a statement of service objectives;
- the development of performance indicators;
- a statement with the identification of the impact of central government activities (e.g. financing);
- more timely information;
- to enhance understanding of the annual accounts by including glossaries of terms and by offering training courses;
- the introduction of "**layers**"¹⁵⁴ of financial reporting information: for the outer layer there could be a simpler

¹⁵⁴ The "stratification" of users and hence the adaptation of the kind of reporting towards their particular needs was also one of the proposals of Daniels, Daniels (JAPP 1991) above.

Such a "diversified" system of reporting, which is not that common in a corporate type of business, has been a tradition in the insurances' financial reporting in Belgium. Accounting systems of insurances produce periodically a variety of financial-technical reports; the majority is mandated and reported to the *Control Office Insurances (CDV-OCA)*. The Control Office is a user having direct access to accounting information and controls among other things: the legality, financial soundness (solvency margin, ...) in order to protect the insurance system and the insured. Apart from this special and profound kind of reporting which is not publicly available, there is additionally the business type of financial reporting by the annual accounts to stock-holders, third parties, the general public, ...). Thus, apparently there is in Belgium some experience in diversified financial reporting and the uniqueness of the annual financial report is not necessary.

narrative type of stewardship information; for internal users there could be more detailed management information, viz. budgeted and ex post performance information.

The exploratory study of Butterworth, Gray, Haslam (FAM 1989) had similar objectives. They mainly examined the readability of English local authority reports by means of a survey. They were also interested in the communication to the public and in the different channels of distribution of the reports (p. 74). Their results, which are comparable with the findings of Collins, Keenan & Lapsley (1991) and those of Rutherford (1983)¹⁵⁵ suggest (p. 83) that the annual reports do **not appear to be widely read** and that they are **less readable** than should be the case. The ways of **distributing the reports** did not seem to be precluding communication.

An interesting potential hypothesis they proposed was the possibility that local authorities prevent the reports to be readable (p. 84): "And, of course, it is always possible that Local Authorities do not intend their reports to be read". Again a similar remark was formulated by Collins, Keenan & Lapsley (p. 1):

"The extent to which these reports communicate the financial results of local authorities effectively, or whether they merely **serve to confuse and obscure** financial messages to potential users is a matter of considerable importance." (emphasis added)

This idea which has not sufficiently been taken into consideration by academics seems to be coincidental with other phenomena such as the issues of manipulation of reports,

¹⁵⁵ "The public made little use of their rights in this area." (Rutherford 1983, p. 159).

"creative accounting", "earnings management"¹⁵⁶; "disclosure management". In simple words one could hypothesize whether there is a sensitivity in what, when, how and to what extent information is disclosed in municipal annual reports.

In a descriptive way Mayston (AAAJ 1993) discussed the notion of accountability using the principal-agent theory: increasing accountability will invoke additional monitoring and bonding costs. Mayston implicitly posits that one should be careful in transferring the private sector model of accountability and efficiency towards the public sector. Important reasons for this are the imperfections of monitoring and bonding through the processes of accounting and auditing in the private sector.

In other words, Mayston's message would be: do not copy just like that the monitoring system of the private sector to the public sector since it is not "good enough" in the private sector.

Patton (FAM 1992) offered an important overview of the existing literature on accountability, starting with Governmental Accounting Standards Board (GASB 1987) Concepts Statement No. 1 in which accountability is seen as: "... the paramount objective from which all others objectives must flow" (p. 179).

In the foreword of an issue of *Financial Accountability & Management* completely devoted to audit and accountability in the public sector Lapsley (FAM 1995) emphasized issues about the portability of practices from the private to the public sector for audit and accountability. Questions around the transferability of accounting, accountability and audit from private to public sector appears to be one of the "leitmotifs" in accounting research over the last 15 years.

¹⁵⁶ Several studies in the private sector address the issue "earnings management". For an overview see Dopuch (1996), who conducted a seminar on earnings management in financial accounting in Tilburg.

5.2.11 Auditing

According to Kurtembach & Roberts (PBAFM 1994), who present a review and summary of public sector accounting research, a lot of auditing studies exist. Some research was done into the demand of municipal audit adapted from theories of private sector audit demand (p. 233).

Kurtembach & Roberts quote a number of articles in which audit fee research is included, such as (p. 234):

- relationship between auditor change and reduced audit fee;
 - design of a model of audit fees for municipalities;
- Rubin (AR 1988) set up a pricing model for audit fees and tested this model based on a similar pricing model for the private sector;
- municipalities' selection of a state or external auditor;

Concerning the factors of audit fees, many similarities between private and public sector were found (p. 235). An example is the study of Roberts, Glezen & Jones (JAR 1990) on public school districts where the auditor change can be explained by reduced audit fees, weaknesses in the internal control and non-compliance with mandatory requirements, which were remarked in the audit report.

As mentioned by Kurtembach & Roberts (p. 235) the quality of government audits by public accounting firms was investigated by the GAO at the end of the 1980s. As an impact of this study audit research began to concentrate around audit quality questions.

An example is a study of Copley & Doucet (1993) in which the relationship between audit quality and audit firm competition was examined. They concluded that competition between auditing firms in governmental audit leads to more audit quality and to a decrease in audit fees.

Also Deis & Giroux (AR 1992) examined factors of public sector audit quality in a study of school districts. Their findings were similar to private sector audit research in that audit

quality is related to the reputation of the audit firm, client power conflicts and audit report timeliness.

Auditing in the non-profit sector differs from auditing in the private sector in that it is seen in a broader perspective. In governments specifically "comprehensive audit" was developed a number of years ago. The term comprehensive audit is explored in a study of Charnes & Cooper (AOS 1980). They criticize that the term "audit" is often interpreted in a narrow way as being the function of "chartered accountant" attesting the "true and fair view" of financial statements and only servicing third parties' needs for information. However, comprehensive auditing is much broader in scope, it is far more than an attest function¹⁵⁷. Referring to Chapter 1, 1.2.9 comprehensive auditing consists of financial auditing (certifying "true and fair view") together with auditing economy, effectiveness and efficiency.

¹⁵⁷ "... auditing is not simply a matter of 'going through the books', ...," (Pugh FAM 1988 p. 63).

5.2.12 Stock market measures, bond ratings

This paragraph addresses the effects of accounting data, annual reports on stock market measures, bond ratings of governments and municipalities.

There are a lot of studies which examined the relationship between financial accounting and various measures related to municipal bonds such as bond ratings, yields, bond issues, net interest costs. Icerman & Welch (JAPP 1989, p. 144), who performed a comparative analysis of 11 similar studies, call this kind of research "municipal market based research". This research is in a way an extension of capital-market-based research to the public sector. Most of the time, bond ratings and similar data are selected as dependent variables, probably because they are publicly-available and easily obtained (Kurtembach & Roberts PBAFM 1994, p. 242).

According to Kurtembach & Roberts (PBAFM 1994, p. 239) public financial accounting research focusing on bond markets emphasizes on two areas: *"bond rating studies"* and *"bond yield studies"*. A similar distinction exists in corporate market-based accounting research in which they are called *"valuation (=levels) studies"* and *"return studies"* (Christie JAE 1987).

5.2.12.1 Bond rating studies

An interesting example of *"municipal market based research"* was the study of Wilson & Howard (JAR 1984). They examined the extent to which market measures in casu *bond ratings* and *net interest costs* are affected by cross-sectional differences in municipal accounting, auditing and reporting practices. They replicated and extended (JAR 1984, p. 208) a previous study of Wallace¹⁵⁸ (JAR 1981), which was one of the first in its kind.

¹⁵⁸ Wallace's study revealed that "interest costs reflect cross-sectional differences in accounting variables and bond ratings reflect cross-sectional differences in auditors and audit reports of municipalities" (JAR 1981, p. 504).

Based on a regression and probit analysis of 350 bond issues in 185 cities and 96 counties, Wilson & Howard found that accounting and auditing variables are associated with bond ratings and net interest costs. These results (JAR 1984 p. 208) were not entirely in accordance with the results of Wallace's study.

In general, the results of examining the effects of governmental financial reporting on bond ratings are rather moderate. For some researchers (Kurtembach & Roberts PBAFM 1994, p. 239), the reason for this is the lack of a theory linking accounting and reporting data to bond market measures. Icerman & Welch (JAPP 1989, p. 158) add as further reasons: the lack of a critical mass of research and the lack of timely and reliable data. Furthermore, in their research note (JAPP 1989, p. 144) they explain the rather poor performance of the municipal accounting models by the effect of measurement differences between the sources of accounting data used¹⁵⁹.

Icerman & Welch started from a comparative analysis of 11 municipal market based studies. They wondered whether the weaker results as compared with similar studies in corporate annual reports could be explained by the effect of data source measurement differences (Census Bureau or CAFR). They found that the effect of measurement differences could explain that the correlations in "municipal market based research" were only slightly significant.

Copeland & Ingram (JAR 1982) examined the association between accounting information and municipal bond rating changes. A first objective was to assess the usefulness of preceding municipal accounting information in predicting bond rating changes. Their second objective was to test whether subsequent accounting information reflects the factors which induced bond rating changes. Instead of developing an optimal prediction

¹⁵⁹ For municipalities there are in the USA more than one accounting source depending on the kind of reporting objective. There is the Census Bureau as a source of accounting data vs. the accounting data disclosed by the Comprehensive Annual Financial Report (CAFR).

model (JAR 1982, p. 278), Copeland & Ingram examined the timeliness and reliability of accounting information in predicting changes in bond ratings. The results of their first objective were ambiguous, the findings regarding their second objective indicated supportive evidence.

Lewis, Patton & Green (AR 1988) developed a statistical model to predict municipal bond rating changes and compared this model with predictions of financial analysts. It appeared that the statistical model was more succesful in predicting rating changes, but the analysts succeeded better in predicting bond ratings. They concluded that humans performed similar as statistical models in predicting bond rating changes.

5.2.12.2 Bond yield studies

Apart from Wilson & Howard's study above, Ingram & Copeland (JAR 1982), also provided an extension of Wallace's municipal market based research. They extended the research to a large set of municipalities (a sample of 122 municipal general bond issues) and employed other bond risk measures. Their independent variables were *Accounting, Auditing and Financial Management Practices*. Although their determination coefficients were merely convincing, they could scientifically conclude that yield premiums and return attributes are influenced by accounting and auditing practices. These findings are in accordance with Wallace's results.

Benson, Marks & Raman (JAPP 1984) worked out a similar research based on regression analysis. The interest costs on new municipal bond issues was regressed on a number of independent accounting and financial variables. They hypothesized that the regression equation for municipalities with stringent accounting regulations is different from the regression for municipalities without such regulations (p. 111). The stringent accounting regulations imposed by 14 US

states seemed to have an effect on borrowing costs. However, due to multicollinearity, it was unclear in what direction¹⁶⁰. This research was relevant because municipal accounting and reporting in the USA is subject to state regulation. The states can freely regulate their own accounting practices for municipalities. Benson, Marks & Raman (JAPP 1984, p. 121) also concluded that reported accounting data can be interpreted and perceived differently in a financial market.

In a study of Ingram & Copeland (1986) the objective was to measure the effects of selected local government accounting practices on:

- 1/ accounting ratios;
- 2/ creditor decisions (proxied by the yield and the changes in yield of municipal bonds).

In this comprehensive study, the researchers used 4 groups of factors and tested the interrelations and links; the factors taken into consideration were: accounting methods, accounting numbers (ratios), socio-economic attributes and finally bond risk/return measures.

The study resulted in multiple conclusions: the ratios implied an inverse relationship between the extent of reporting and the financial performance of the municipality (p. 97); accounting practices can alter the extent to which accounting numbers (ratios) are reliable signals of socio-economic attributes (p. 97-98); the study also demonstrates that a decrease in the reliability of the signals is associated with less reliance on them by creditors.

Ingram, Raman & Wilson (AR April 1989) examined whether municipal annual financial reports directly convey information to the bond market. They found that it was not clear from prior research whether accounting data merely reflect other independent variables impounded in bond measures or whether the accounting data had an impact on security prices. Their

¹⁶⁰ The authors assumed that the stringent regulations on accounting practices resulted in a lower borrowing cost.

research led to the conclusion that there was no significant market reaction to the release of municipal annual reports. Furthermore, they conclude that bond investors are not monitoring accounting reports in assessing market values of seasoned bond issues.

Feroz & Wilson (AR 1992) criticized the rather mixed and inconsistent results of former research concerning accounting variables and bond measures. They suggest that these weaknesses might be attributed to (p. 481):

- differences in the entities examined (cities, counties, school districts);
- different time periods examined;
- different definitions of variables;
- differences in the mix of bond issues.

From this point of view, they examined whether market segmentation affects the association: municipal financial disclosure and net interest costs of new issues municipal bonds.

They found that the market segmentation was indeed an important factor. In the *national market* bond prices did not correspond to financial statement disclosures. In *regional markets* for municipal bonds on the other hand, with less alternative information resources, bond prices were more strongly associated with the municipal financial disclosure. Banker, Cooper & Potter (AR 1992) analysed and discussed the contributions of this last article as well as the study of Deis & Giroux (AR 1992) concerning governmental audit, both released in *The Accounting Review*¹⁶¹.

In 1993 Giroux & Deis (AAAJ 1993) took the effects of government accounting disclosures on investors interests into

¹⁶¹ Banker, Cooper & Potter criticize the sparse coverage (p. 506) of topics in governmental accounting and auditing in the *The Accounting Review* and present a number of ideas for further research, such as research into identification and satisfaction of user needs (p. 506); "Service Efforts and Accomplishments" (SEA) as a major element of governmental financial reporting (p. 507) and research concerning value-for-money audit, comprehensive auditing (p. 507-508).

account in their study.

Instead of focusing on financial accounting, auditing and reporting practices as independent variables in "*municipal market based research*", some studies concentrate on a more specific independent variable. For example, Marks & Raman (JAR 1985) concentrated on the *disclosure of pension liabilities* and examined whether the lack¹⁶² of that disclosure affected risk premiums in municipal bonds.

Another example is a study of Apostolou, Giroux & Welker (JAR 1985) in which the *spending rate* of municipalities is used as an independent variable in order to explain the risk assessment of investors.

5.2.12.3 Conclusions of market based research

In general the subject of "*municipal market based research*" is often similar: the effect of accounting data and disclosures on municipal bond data (bond ratings, bond yields, changes in rates, changes in risks, etc.) is being measured. Now and then these studies encounter difficulties such as the absence of basic theoretical concepts, problems in definitions of variables, differences in the kinds of entities, etc.

Sometimes, interesting results appear, but often they are rather mixed. Kurtembach & Roberts (PBAFM p. 244) conclude that apparently information sources other than governmental financial reports are often used in assessing value by bond market participants. The use and importance of financial reports suffers from the existence of alternative types of information. Referring to Vela (CIGAR 1997, p. 7) the influence of capital markets at local governmental level is very weak in European countries, which makes this kind of research opportunities also In Belgium limited.

¹⁶² In public sector accounting pensions are often underestimated and insufficiently taken into account at the liabilities-side of the balance sheet.

5.2.13 Political behaviour

A few studies were aimed to examine the effects of governmental accounting data and annual reports on **political behaviour**.

The impact of municipal accounting information on voting behaviour was treated in a study by Ingram & Copeland (AR 1981). In this study the ability of accounting information to predict voting behaviour was examined, based on the theory of voter rationality. The predicting of voting behaviour was fairly accurate. However, the results did not prove that accounting information on its own could be considered the causal factor.

Another study analysed the influence of financial accounting measures on mayoral elections (Feroz & Wilson, FAM 1994).

5.3 OVERVIEW OF PREVIOUS ACCOUNTING PRACTICE RESEARCH

5.3.1 Explorative, descriptive research

There are some **descriptive, exploratory studies** regarding governmental accounting practices, often set up by regulatory authorities. Examples are GASB: Jones et al. 1985, CICA 1980 and CICA 1985 for American and Canadian States and local governments.

Through examining the annual accounts these studies empirically describe the different types and possibilities of accounting techniques, assertions and principles (e.g. full accrual vs. modified accrual and cash; consolidated vs. fund type of statements). They also focus on conceptual framework issues sometimes leading to debates about the best suitable accounting practices. The findings are mainly descriptive and result in the formulation of recommendations in a normative way concentrated on principles, forms and contents of financial reports.

A number of studies concentrate on the **compliance of governmental accounting practices with accounting regulations**. Faber & de Jong (1988) looked at the municipal accounting reform towards accrual accounting in The Netherlands involving the investigation of annual accounts. The major findings were non-compliance to regulations and a serious heterogeneity (p. 38).

For local authorities in England and Wales (counties and districts) Jones & Pendlebury (ABR 1982) focused on the conformity of accounting practices 1977/78 to the extant professional and statutory requirements. Their survey revealed that conformity with existing professional and statutory requirements was poor in substantial respects. In the same period Rutherford (1983, p. 161) also found varying degrees of detail and methods of presentation. For the accounts 1987/88 a similar survey was again conducted (Jones & Pendlebury FAM 1991) showing improvements, albeit still weak.

Chandler & Cook (FAM 1986) came to similar conclusions in their accounting practice research for local authorities in England and Wales 1983/84. Instead of adhering to the spirit of the regulations, local authorities appear to follow the letter and the published information is of limited value to citizens and voters.

Although with an objective of management accounting research, the paper of Merrouche & Devlin (1995) concerning the allocation practices of overheads in local authorities in Scotland has a number of methodological similarities. The CIPFA regulation *"The Management of Overheads in Local Authorities (1991)"* led to the formulation of new accounting practices which aims at improving accountability and value for money. In a survey based on annual accounts Merrouche & Devlin examined to which extent local authorities have been able to adopt the new recommendations, whether differences appear in the degree of compliance and what type of problems local authorities in Scotland encountered in applying the recommendation.

Contrary to all these cross-sectional studies, Lin, Baxter & Murphy (FAM 1993) worked out a longitudinal study¹⁶³ examining the compliance of accounting practices with PSAAC recommendations¹⁶⁴ and the major areas of non-compliance based on the annual financial reports of the 13 Canadian states.

The compliance issue is strongly accentuated by Lin, Baxter & Murphy as a key-factor in the standard-setting process of public sector accounting (p. 239).

They did not examine the causality of the cross-sectional differences of the 13 states to some explaining factors, they

¹⁶³ The three consecutive years before the issue of the PSAAC statements No. 3 and No. 4 were 1984, 1985, 1986; the three consecutive years afterwards: 1987, 1988, 1989.

¹⁶⁴ PSAAC issued Statement 3 and 4 which are voluntary standards for accounting and reporting. Statement 3 is more technical: it contains the presentation of the financial reports (type, form, ...). Statement 4 attends to more complicated aspects of accounting and reporting (reporting entity, accounting methods, ...).

just studied the situation before "treatment" (by PSAAC Statement 3 issued in 1986) and after longitudinally .

Their study revealed that accounting and reporting practices have become more extensive over time and that the compliance with the two regulating statements PSAAC increased. The two standards became more accepted and were gradually implemented. On the other hand overall compliance¹⁶⁵ was still rather low (64,4%, p. 241) .

Lin, Baxter & Murphy found that the compliance rates varied considerably as between the Statements 3 and 4. They attempted to explain these differences based on the different nature of these standards¹⁶⁶. Furthermore, (p. 249) requirements with an emphasis on the format of the financial report are easier to implement. Requirements regarding accounting and measurement aspects such as valuation of assets, matching principle, ... were less adhered to.

More specifically the following issues have been addressed:

*** Accounting for fixed assets**

For Canadian States (Lin, Baxter & Murphy FAM 1993), accounting for fixed assets resulted in many differences and in a low compliance with accounting recommendations.

In the UK accounting practices are enforced upon local authorities by legal rules which require the application of proper practices, which are the so-called SORP. The current SORP replaces the "debt charge accounting system" by a commercial accounting (i.e. activating fixed assets and depreciation following their lifetime irrespective of their way of financing). CIPFA objectives have been incorporated in the SORP. In UK local authorities Allen (CIGAR 1995) examined

¹⁶⁵ Overall compliance rate as a percentage of the maximum compliance score.

¹⁶⁶ Lower compliance with statement 4 could be attributed to the implied "full disclosure" recommendation which is disliked by government.

the effects of applying business-like capital accounting concepts.

Allen attempted to examine the implementation and to measure the effects of applying business-like capital accounting concepts in UK local government environment. He developed a survey requesting some technical information as well as asking for the perception of accountants, officers and members of the council.

A preliminary sample revealed that the compliance with this changed capital accounting system is not particularly strong and that the *de minimis* level of assets to be included although very difficult to measure, is strongly varying, thus affecting¹⁶⁷ comparability. A complete exclusion of assets (often infrastructure) sometimes occurs.

* Timeliness

For Canadian States (Lin, Baxter & Murphy FAM 1993), the timeliness of the financial reports resulted in many differences and in a low compliance with accounting recommendations. The same was found for municipalities in 1985 in The Netherlands (Faber & de Jong 1988): just a few annual accounts were ready before 1st November of the next year; these findings were confirmed by Volmer (1992): the publication date 1986 varied from 1 to 2 years after balance date.

* Comparability

Allen & Sanders (FAM 1994) state that financial reporting practices in US local governments vary greatly and that their quality is still at a low level, in spite of state legislation and regulations by different organisations such as GFOA, AICPA

¹⁶⁷ Property tended to be excluded at levels of £ 20,000 to 100,000; for other assets there was a range of £ 2,000 to 30,000).

and NCGA.

For local authorities in England and Wales (counties and districts) Jones & Pendlebury (ABR 1982) focused on the extent of comparability of the accounting output 1977/78. They concluded (p. 131-132) that the information between authorities was diverging from rules and not comparable. For the accounts 1987/88 a similar survey was again conducted (Jones & Pendlebury FAM 1991) showing only slight improvements.

For municipalities in The Netherlands Faber & de Jong's research 1988 revealed a poor comparability between municipalities due to either gaps in the regulations or to non-compliance.

Summary

Generally, the above empirical governmental accounting studies reveal:

- the reforms are mostly an accounting change from cameralistic/cash accounting systems to accrual accounting inspired by or transferred from business accounting practices;
- there is often a lack of an accounting framework, no generally accepted bases, debates around recording, valuation and depreciation principles;
- the occurrence of several differing accounting techniques, such as: "cash", "modified accrual", "full accrual", "debt charge accounting", "encumbrance accounting";
- a strong heterogeneity (diverging from rules; varying practices) and topical differences in accounting practices and disclosure;
- an often weak comparability of annual reports, even within the same country or environment;

- resistance to adopt the reformed procedures, mainly due to traditional more formalistic registration and accounting habits;

- user need shortcomings; difficulties in understandability, readability, less interest from the user, confusion and misunderstandings among users.

5.3.2 Causal, explanatory research

Accounting and disclosure practices vary strongly from one governmental entity to another. Attempting to explain these cross-sectional differences across entities is the subject of a number of rather **explanatory, causal accounting studies**.

An analysis is provided in Appendix I. Comparative analysis of governmental accounting practices research.

5.3.2.1 Agency-theory

The most important examples primarily concern US Governments. Zimmerman (JAR 1977) applied the **agency-theory** to municipal governments in which "the voters are the politician's principals" (p. 118) and "The principal can limit divergences by monitoring the agent, thereby incurring monitoring costs." (p. 117).

His empirical research indicated that there was a significant relationship between the form of government¹⁶⁸ ("manager-cities" vs. "mayor-cities" and disclosure differences proxied by a) the length of reports and b) the degree of audit. Manager-cities were more likely to publish longer reports and they had the reports better audited than mayor-cities, which supported his assumed "agency-theory".

This empirical issue was part of a more extensive approach in interpreting and explaining municipal accounting and disclosure issues. The work of Zimmerman is quoted many times in literature and it offered some bright ideas *avant-la-lettre* which are still asking for attention such as:

- the negative attitude of municipal officers towards the adoption of reforms requiring supplementary reports because there is very little demand for such information,

¹⁶⁸ "Manager-cities" have an appointed city manager as chief operating officer. In "Mayor-cities" it is the elected Mayor who has the function of chief operating officer. The fact that the manager is appointed is assumed to create an agency relationship.

- supplementary reports based on full accrual accounting are not prepared because voters have little use for them;
- the incentive of politicians to supply complex reports: why rarely consolidated financial reports?

The distinction manager-mayor municipalities was taken over in other municipality studies with differing results as shown in Appendix I. (Magann 1983, Evans & Patton JAE 1983, Robbins & Austin JAR 1986, Evans & Patton JAR 1987, Ingram & DeJong JAPP 1987, Giroux JAPP 1989, Banker, Bunch & Strauss 1989, Dwyer & Wilson JAPP 1989, Volmer 1992).

Christensen & Mohr (FAM 1995 p. 324) confirm Zimmerman's findings that the monitoring incentives on accounting information are much weaker in the non-profit sector¹⁶⁹.

Most of the studies examine the indicator debt belonging to the factor management incentives. Under the "agency theory" the issue "debt" is assumed to increase the agent's incentive to supply monitoring. Therefore, a positive relationship between debt and the degree of disclosure is hypothesized. The findings show mixed results: some conclude that there is a significant relationship (Evans & Patton JAE 1983; Robbins & Austin JAR 1986; Evans & Patton JAR 1987; Banker, Bunch & Strauss 1989; Cheng JAPP 1992); other studies do not reveal any significance (Baber JAE 1983; Baber & Sen JAPP 1984; Ingram JAR 1984, Ingram & DeJong JAPP 1987).

5.3.2.2 Political factors

Some studies incorporate political factors (political competition, number of seats, voter turnouts, ...) in their analysis in an attempt to explain the differences in

¹⁶⁹ "A primary reason for this is that the costs of a more extensive monitoring of the agent exceed the benefits that can accrue to the many and diverse individual principals of the nonprofit agency relationship." (Christensen & Mohr FAM 1995, p. 324).

accounting practices or other disclosure measures. Apparently, in a state environment the political factors appear to be mainly significant (Baber JAE 1983; Baber & Sen JAPP 1984; Ingram JAR 1984; Carpenter & Feroz AH 1990). In a local government environment on the other hand the association with political factors is insignificant (Robbins & Austin JAR 1986; Evans & Patton JAR 1987; Giroux JAPP 1989; Volmer 1992).

5.3.2.3 Professionalism

Being a broad variable the professionalism of the officials and of the accounting staff was approached by indicators and surrogates¹⁷⁰ such as:

salaries, financial ability, education, auditor qualification, participation MFOA/GFOA, GFOA certificate, etc. The importance and significance appears to be very mixed; the findings are rather inconsistent.

5.3.2.4 State effect

Mainly in the United States the state effect (i.e. different state government regulations) on municipal reporting could be examined. The findings of such studies are mixed. Ingram & DeJong JAPP 1987 found that GAAP requirements have no effect on reporting practices for municipalities in GAAP states. On the other hand, non-GAAP requirements have a significant effect on the disclosure for municipalities in states with non-GAAP requirements.

¹⁷⁰ See Appendix I. Comparative analysis of governmental accounting practices research.

5.3.2.5 Government size

Almost every study has incorporated the government size operationalised by the population or a measurable surrogate such as enrollment in schools. The findings are varying and this subject is further looked into in Chapter 4.

5.3.2.6 Disclosure index

Ingram attempted to explain cross-sectional differences in disclosure of US States by economic/political incentives (JAR 1984). His *disclosure index* which measured the technical extent of disclosure of accounting practices, has been replicated or modified in most of the other governmental studies. For US municipalities Robbins & Austin (JAR 1986) extended the index to a *compound index* measuring the extent of disclosure weighted by the relative importance. It appeared though that the *compound disclosure index* does not affect the results. Only slight differences became apparent when comparing compound and simple indices.

Ingram & DeJong (JAPP 1987) also developed a *compound index* for US municipalities in the context of state regulations. Giroux (JAPP 1989) developed a *disclosure index* for US municipalities limited to the disclosure of "pension benefit", "budget format" and "statistical section". He concluded that governmental accounting disclosures are at least marginally related to political/economic incentives.

Cheng (JAPP 1992) practically replicated the same *disclosure index* as Ingram (JAR 1984) for US States in a model building and testing LISREL factor-analysis.

For Dutch municipalities Volmer (1992) applied a *disclosure index* inspired by Ingram's (JAR 1984). He also attempted to explain the apparent cross-sectional differences in this

index. His major findings were that in general there is an important heterogeneity in the extent of and the kind of disclosure, which can be mainly attributed to the size and the kind of management of the municipality.

Allen & Sanders (FAM 1994) applied Ingram's index for US municipalities and attempted to explain the differences in the index by the professionalism of the financial officer, government size and the factor "reporting requirements externally imposed".

For tertiary education institutions in New Zealand Coy, Tower & Dixon (FAM 1994) constructed a *modified accountability disclosure index* to measure characteristics of annual reports in a number of respects similar to Ingram's index with fixed weighting coefficients. Although meticulously measured, their index was mainly applied in a descriptive way. They just related this output-measure to the institutional size and to the timeliness hypothesizing that larger institutions are able to prepare better reports and that it takes longer to prepare better reports, but they did not find any significance (FAM 1994, p. 259).

5.3.2.7 Timeliness

Attempting to explain the **timeliness** of US municipal financial reporting Dwyer & Wilson (JAPP 1989) examined a number of related economic and regulatory variables and found some significance (e.g. kind of message; kind of audit opinion). Other studies incorporated a measure of timeliness in the independent variables (Magann 1983) and one study integrated timeliness in the disclosure index (Volmer 1992).

5.3.2.8 Other proxies for the dependent variable

In some studies the dependent variable measuring the accounting practice or disclosure is proxied by some objectively measurable indicators such as whether or not a certain certificate was obtained (Evans & Patton JAE 1983; Magann 1983; Evans & Patton JAR 1987).

In order to measure the audit practice Baber (JAE 1983) applied the height of the state's yearly audit budget.

Another possibility to proxy the accounting practice is the observation of a certain attribute such as the decision to use GAAFR defined funds (Baber & Sen JAPP 1984) or the decision to adopt GAAP (Carpenter & Feroz AH 1990) or the capitalisation of collections (capitalisation practices) in museums (Christensen & Mohr FAM 1995).

These studies assume that the quality of the particular attribute completely represents the independent variable. For example, Baber & Sen (JAPP 1984) assume that the use of GAAFR fund definition, which is a dichotomous variable, proxies a state's compliance with GAAFR.

Such a definition can lead to a problem in **construct-validity**. Measuring the attribute "GAAFR fund definition" is not the same as measuring the complete and actual compliance with GAAFR. The construct measures the incentive to accept GAAFR fund definition (= input-oriented), not the actual use of standard accounting and reporting methods (= output-oriented). Expressing that the state uses the fund definition (*procedure*) could be called step 1. But step 2, i.e. testing whether there is an actual compliance (*compliance with the procedure*), should be tested before concluding that there is a complete compliance with GAAFR. In the other direction, expressing that if a state has not accepted the GAAFR fund definition, it is actually not at all in compliance with GAAFR, is not proved

either¹⁷¹.

Baber & Sen themselves mention this methodological threat (p. 104), but they try to explain it away using two alternative measures of the states' compliance offered by Ingram (JAR 1984). Based on the significant differences, they conclude that their dichotomous variable proxies for overall adoption of GAAFR. Nevertheless, they admit that certain coefficients are statistically less significant and that there remains a possibility that errors in measuring the dependent variable biases their statistics.

5.3.2.9 Summary

* The purpose of these studies is to explain cross-sectional differences mostly in accounting disclosures. The implementation itself and the accounting "processing" leading to accounting disclosure is not examined. In other words, the previous studies' motto is:

What causes (or what is associated with) the differences in results (=accounting disclosures)?

The question is not additionally:

How are the results reached and which are the occurring differences in the processing?

* Except for a few studies the factor timeliness is not treated. This could be due to the fact that most studies were conducted in a stable environment, an environment which was not dealing with a sudden reform or an interrupted legislation.

* As can be expected and understood the external validity across different countries or environments is limited. A

¹⁷¹ This theory is only valid if that fund definition is a *conditio sine qua non*. Is it true that a state cannot adopt a number of GAAFR principles without using the GAAFR fund definitions?

motivation for this conclusion is the topical character of governmental accounting systems and the findings which are not congruent in a number of studies.

* Looking at previous comparable studies from a methodological point of view, it is sometimes surprising that the applied surrogates or observable indicators often are the same across different studies¹⁷², but that the function and interpretation of that surrogate differs. The factor or variable the surrogate stands for can vary a lot:

- * in the study of Ingram JAR 1984 and Robbins & Austin JAR 1986 the surrogate professional auditor stands for the construct "Professionalism" which is in turn representative for the factor "Management incentives";

- * the set of surrogates, of which the independent auditor Y/N is one, stands for the variable "Technological constraints" in Dwyer & Wilson JAPP 1989;

- * some "chartered accountant"-indicators represent the variable "Bureaucracy needs and abilities" in Cheng JAPP 1992;

- * the surrogate outside auditor Y/N is the same as the variable "Outside auditor" in Volmer 1992.

Apparently, the construct validity is not interpreted in a similar way by these researchers.

¹⁷² e.g. the indicator: professional auditor (Y/N).

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2de Boekdeel: PART II, PART III

Proefschrift voorgelegd tot het behalen van de graad van
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Part II. Methodology data collection

Chapter 6: Research methods

6.1 TYPE OF RESEARCH

Contrary to a number of accounting studies (e.g. CICA 1985), the intended study is not set up as a normative accounting research. The purpose is not to develop an accounting framework or accounting standards and rules (determining the "best" suitable method of financial accounting and reporting), nor to study how the municipality *should* account.

Neither is it the intention to be an "a priori" analytical research in which models are developed, lab experiments are performed, "cash" and "accrual" are compared and evaluated. There are a lot of examples of such studies which give rise to "debates"¹⁷³. For example, the potential superiority of accrual accounting (Kwong JAPP 1994) will not be questioned.

The present study has nothing to do with an opinion research, not is it primarily interested in perceptions (Wallace 1991, p. 10). This does not imply that if necessary the factor perception would not get a chance.

In Skandinavian countries action research is very common and is considered to be a medium to study an accounting reform or adoption, as is also suggested by Lüder¹⁷⁴. Action research is more than just being an observer in the field looking at the "treatment" while taking place. The action researcher functions as an active participant in the "treatment". Although certain observing actions have been conducted¹⁷⁵ it

¹⁷³ See Chapter 5: Previous research.

¹⁷⁴ See Chapter 2, 2.5 UNDERLYING THEORIES.

¹⁷⁵ This happened while interviewing municipal officials and during the 10 sessions of the "post experience course" organised by the Vlerick School for Management for enrolled Municipal Treasurers and officials in Flanders. J. Christiaens was lecturer for the part municipal financial accounting. This course has provided the opportunity to communicate with the accounting responsables, to interact regarding accounting issues and problems and to

is certainly not the purpose to perform an action research.

This study is completely conducted in a field setting under actual conditions ("a posteriori" real world research using actual data).

This **empirical research** aims at firstly exploring, describing and comparing in an objective way the actual adoption and implementation of accrual accounting in a governmental context which had no previous experience of business accounting. The focus is on finding out who, when, how much, to what extent the compliance succeeds. Secondly, the probably occurring empirical differences in implementation will be considered.

In the third research question the cross-sectional differences considering the compliance will be tested on assumed associations with situational factors. Lastly, the extent of comparability will empirically be investigated.

6.2 RESEARCH METHOD

The empirical study will mainly use data and documentary evidence from municipalities, particularly a copy of the annual reports and hence it could be called an **archival research**¹⁷⁶.

In addition, a number of data can only be acquired efficiently by asking the Municipal Treasurers. This part could be called a **survey**, which will be elaborated by means of a questionnaire. This questionnaire only contains questions for which the answers cannot systematically be found in the requested annual reports 1995 and first balance sheet 1st Jan. 1995.

assess the possibilities of usefulness of the accounting output towards internal municipal users.

¹⁷⁶ "Generally, an archival study will have a greater degree of external validity than other research approaches, ..." (Wallace 1991, p. 31).

Thirdly, a minority of some financial archival data stemming from secondary sources is needed. Table 6.1 summarises the methods of data collection.

Table 6.1: Methods of data collection

Information needs	Method/Information providers
a) Accounting and disclosure data from annual reports	Internal archival data <i>Source: annual reports</i>
b) Internal municipal data	Survey <i>Source: questionnaire</i>
c) External (financial) data	External archival data <i>Source: Secondary data sources</i>

In prior similar accounting practice research, only a few model-building studies were done (Evans & Patton JAR 1987; Cheng JAPP 1992); just 1 case-study and the others (about 15) are all surveys.

The present study is interested in sufficiently capturing the characteristics and outcomes of the changed accounting system in practice. For that purpose a case-study approach is less advisable.

The research is set up **cross-sectionally**, not longitudinally. At this time a longitudinal study cannot yet be performed since the reform happened too recently. Suitable historical data are not yet existant. A longitudinal study, which might be encouraged, could become feasible in the coming years. In previous similar research there is just one longitudinal study of Lin, Baxter & Murphy (FAM 1993) while Jones & Pendlebury (FAM 1991) have made a comparison in time by replicating their former study (ABR 1982).

Since the approach is not longitudinal most of the internal

validity threats¹⁷⁷ related to time-series will not occur.

The data series a) and b) (table 6.1) will be obtained by a mail-survey, which will request the municipal annual accounts of 1995 and first balance sheet 1st Jan. 1995¹⁷⁸ combined with some questions regarding certain characteristics of the municipal accounting department, structural variables of the municipality, etc.

Triangulation

Albeit not systematically, a number of data will be gathered twice. It is likely that the information of a number of responses in the questionnaire¹⁷⁹ can also be found in the annual reports. Hence, the combination of achieving "archival" data with responses to the questionnaire will constitute a test of the convergence of the data, which may improve the validity of the study. In other words, a number of responses to the questionnaire are going to be validated by mutual comparison to the annual accounts in order to qualify the quality of the data.

A similar approach was somewhat conducted in a few previous studies (Ingram & deJong JAPP 1987, p. 257; Volmer 1992, p. 21).

This approach of gathering information twice somehow aims at a

¹⁷⁷ These threats are mainly *History* (Cook & Campbell 1979, p. 51; Abdel-Khalik & Ajinkya 1979, p. 34; Wallace 1991, p. 18, 22-23); *Maturation* (Cook & Campbell 1979, p. 52; Abdel-Khalik & Ajinkya 1979, p. 34; Wallace 1991, p. 19, 24) *Testing* (Cook & Campbell 1979, p. 52; Abdel-Khalik & Ajinkya 1979, p. 34; Wallace 1991, p. 19, 24); *Instrumentation effect* (Cook & Campbell 1979, p. 52; Abdel-Khalik & Ajinkya 1979, p. 34; Wallace 1991, p. 15-18, 22); *Mortality* (Cook & Campbell 1979, p. 53; Abdel-Khalik & Ajinkya 1979, p. 34; Wallace 1991, p. 18, 23).

¹⁷⁸ or earlier for the municipalities which have started before 1995 (experienced municipalities).

¹⁷⁹ For some questions it is likely that their answer could be obtained by just reading the annual reports. Nevertheless, questions were developed in order to check the response quality and to ensure the obtaining of the information anyway.

triangulation to improve *validity* (Wallace 1991, p. 11) in that there is an attempt to look at the same accounting data from different perspectives. The first two elements are the archival data vs. survey data. The third element are the several interviews with Municipal Treasurers, officials and specialists in the pretesting phase¹⁸⁰ and in the survey¹⁸¹ considering municipalities which have not responded after two requests. As such the approach includes a kind of a "between-method" triangulation instead of a "within-method" triangulation which just uses multiple techniques to collect data (Jick 1979, p. 602-603).

¹⁸⁰ See Appendix II. List of interviewees pretesting phase.

¹⁸¹ See Appendix III. List of interviewees survey.

Chapter 7: Sampling design

7.1 OBJECTIVES

The study objectives have already been discussed. The reasons for sampling are obvious: examining the whole population of Flemish municipalities would be too extensive and the added value would be minor compared with a sampling approach.

2.2 CHARACTERISTICS TO BE STUDIED

The characteristics to be studied are included in the questionnaire: timeliness, completeness, valuation, etc. and in the extent of compliance as discussed in Chapter 4: Concept and constructs.

7.3 POPULATION AND SAMPLING UNIT

The population in the study consists of all 308 municipalities of the Flemish District¹⁸² in Belgium, legally defined by NGW. Since they are all well-known and registrated, the sampling frame is exactly the same as the population. Each municipality irrespective of its characteristics is a sampling unit.

7.4 RELIABILITY OF THE SAMPLE

In the current complex situation it is not feasible to apply a generally accepted reliability level of 95% because of the variety of unknown standard-deviations. The reliability was not seriously considered in previous studies¹⁸³ either.

¹⁸² The 19 municipalities of the Brussels' Capital District are not considered, nor the 262 municipalities of the Walloon District.

¹⁸³ See Appendix IV. Sample sizes municipalities.

7.5 SAMPLE SIZE

There appears to be a lack of methodology to determine the sample size in governmental accounting research; some studies tend to focus on an arbitrarily defined top stratum and then examine all its units. This was the case in practically all American studies¹⁸⁴. The European studies tend to cover the whole population unstratified but with an arbitrary sample size (i.e. without validating or motivating the chosen sample size).

It is indeed very difficult to form a reasonable assessment of the appropriateness of the sample size. Apart from reliability and precision, an important factor albeit difficult to quantify is the variability of the population (Wallace 1991, p. 36). A preliminary empirical analysis (Christiaens 1996a, Christiaens 1996b) revealed that the implemented accounting practices of Belgian municipalities vary a lot with respect to different features. In an attempt to capture the variation in the population sufficiently way, a **sample size of 100 municipalities** is taken, which represents the population fairly well. It is certainly a stable number and with respect to the total number of 308 municipalities it is a quite sizeable coverage of almost a third.

The sample will not be limited to larger municipalities like in the UK and in France. *Firstly*, it is not necessary because even the very few smaller municipalities have at least 1,000 citizens as a result of the municipal mergers¹⁸⁵ in 1976, in contrast to other European countries where a lot of very small communes or municipalities still exist. *Secondly and most importantly*, the research objective is to achieve a complete, general picture of the accounting reform in practice irrespective of the individual financial importance of each municipality.

¹⁸⁴ See Appendix IV.

¹⁸⁵ Gemeentelijk Zakboekje 95-96 p. 3.

7.6 SELECTION METHOD

Most of the previous studies are based on random samples¹⁸⁶, except for some that apply a stratified random selection concentrating on the stratum of larger municipalities. Still others elaborate an intentional sample in order to obtain the data more easily.

Table 7.1: Sample size

Size Cat.	Habitants	Number of Municipalities ¹⁸⁷	Sample	%
1	> 130,000	2	1	50%
2	50,000-130,000	10	3	30%
3	30,000-50,000	25	8	32%
4	20,000-30,000	38	10	26%
5	15,000-20,000	48	24	50%
6	10,000-15,000	85	23	27%
7	5,000-10,000	85	25	29%
8	< 5,000	15	6	40%
		-----	-----	-----
		308	100	32%

The municipalities considered here are randomly selected (i.e. aselect), which means that each municipality had the same chance to be selected without any interacting. By means of a random number generator¹⁸⁸ the 100 Flemish municipalities were selected¹⁸⁹ and the categories are shown in table 7.1.

¹⁸⁶ See Appendix IV. Sample sizes municipalities.

¹⁸⁷ Sources: Ministerie van de Vlaamse Gemeenschap (1996), De Gemeentefinanciën; Municipal Database as of 16th October 1995, Gemeentelijk zakboekje 95-96, Kluwer Editorial.

¹⁸⁸ For this purpose a specific macro for the spreadsheet LOTUS has been developed, see Appendix V.

¹⁸⁹ A list of the 100 municipalities is included in Appendix VI.

7.7 MAILING AND NON-RESPONSE APPROACH

Based on specialised literature and handbooks research methodology¹⁹⁰ the procedure of the mailing survey is as follows.

t = 20th November 1996	Sending out questionnaires
t+2 weeks = 4th December 1996	Follow-up mailing (2nd request) to non-respondents
t+4 weeks = 20th December 1996	Follow-up of non-respondents by phone

The addressee by name¹⁹¹ on the questionnaire is the Municipal Treasurer since this person is responsible for the accounting activities and accounting output. In similar studies the questionnaire is often sent to similar persons¹⁹².

It is likely that the municipalities will not be reluctant to return the questionnaire since the limited number of addressed municipalities in the preliminary studies (Christiaens 1996a; 1996b) quickly agreed. They cooperated and provided the annual accounts and accounting data without any reservation.

Nevertheless, to cope with the potential problem of non-response a copy of the questionnaire is sent also to the *College of Mayor and Aldermen*, which may be an incentive to fill it in and return it. Furthermore, in the "Instructions" next to the questionnaire the possibility of a partial

¹⁹⁰ See "Total Design Method" Dillman 1978, "Total Survey Design" Fowler 1993, p. 7, 46 and Tromp & Rietmeyer 1989 p. 50, 54.

¹⁹¹ The Municipal Treasurers could easily be identified using Kluwer Editorial's *Gemeentelijk Zakboekje '95-'96*.

¹⁹² Evans & Patton (JAR 1987, p. 143) sent their questionnaire for American municipalities to the Chief Financial Officer (CFO); this function is more or less similar as the Municipal Treasurer function in Belgium.

completion instead of non-completion is suggested as well.

The questionnaire is preceded by a cover letter serving as an introduction, explaining the purpose of the study and motivating the respondent by verbal appreciation.

The establishing of trust was done by the identification of "University of Gent" (Dillman 1978, p. 18) on the cover letter and by "Faculty" stationery on the envelope; the mailing addresses were print and stamps were stuck on the envelopes to avoid an impersonal outlook.

The design of the questionnaire is inspired by some handbooks like Tromp & Rietmeyer (1989, p. 54) and by the survey of Scheid & Lande (1995).

A copy of the questionnaire in both languages is included in Appendix VII.A Questionnaire (English version) and in Appendix VII.B Questionnaire (original Dutch version).

Chapter 8: Investigation questions

8.1 QUESTIONNAIRE

As mentioned above a sample of 100 Flemish municipalities is requested to complete the questionnaire.

This questionnaire asks for archival data rather than for perceptions or attitudes of Municipal Treasurers, though the focus on the attitudes and perceptions of the Municipal Executives to the accounting changes would also be an interesting research theme.

This is due to the rather technical point of view of the study. The questions in the questionnaire are set up to collect accounting practice data which are not likely to be found in the annual reports 1995 nor in the first balance sheet. Therefore, the open-ended questions are limited in order to facilitate the processing of the answers. Nevertheless, on the last page there is an important open-ended question addressed to the Municipal Treasurer and asking for likes, dislikes of the accounting reform, encountered problems and difficulties in implementation, suggestions, etc.

In the questionnaire and in the research approach in general there is an overriding issue of substance vs. form. This does not mean that the study is purely on substantive accounting alone. There are also a lot of questions which are dealing with a number of presentational aspects.

These presentational questions are not on their own but are considered insofar that they give indications on the accounting practice and the compliance with reformed regulations. Of course, compliance with legislation and regulations insofar that they influence the accounting output, viz. the annual reports as defined above¹⁹³.

Most of the questions are designed to be responded with yes/no whenever possible.

¹⁹³ See Chapter 2, 2.4 LIMITATIONS OF THE RESEARCH.

Instrument testing

After an "in-house" (Emory 1980, p. 222) testing of the questionnaire in the Department of Accountancy and Management Control at the Faculty, the first draft of the instrument has been tested in the field. This was done by a consecutive discussion with the Municipal Treasurer and Bookkeeper of a certain municipality and the Head Bookkeeper of another municipality. These "reviewers" come from different angles.

Anonymity was considered important in this study to avoid side effects and an unsolicited sphere of competition among municipalities. Moreover, some rather sensitive questions were also included.

8.2 CLARIFICATION QUESTIONS

In designing the questionnaire the following addressed issues need some clarification.

8.2.1 Question II-2

Question II-2 of the questionnaire is asking for information about the relationship with the OCMW-hospital if existent and about the accounting practice regarding the OCMW-hospital deficits. In order to get a second proof an additional test could be the looking up of the budget-article 872/435-02 *Contributions in deficits of hospitals* in the budgetary accounts. This budget-article is technically linked to G/L account number 63618 *Contributions in the deficits of public hospitals*.

8.2.2 Question II-3

Question II-3 attempts to collect information about balance sheet items which have been partly or completely left out of the first drawing up of assets and liabilities 1st Jan. 1995. Obviously, the validity risk of responding dishonestly or the unwillingness to communicate these items exists. Therefore, this kind of question is supplemented with additional tests on the completeness. Examples are analytical review tests on certain items of the fixed assets.

8.2.3 Question III-1

This question attempts to inventory the characteristics of the municipal accounting staff. There is no strict definition as to who belongs to the accounting staff: some employees work for the budgetary accounting; others have a more administrative task and others again combine financial accounting with other administrative activities, etc.

In the study it is presumed that the Municipal Treasurer as well as the Municipal Secretary are both automatically engaged in financial accounting activities. However, sometimes in practice it is only the Municipal Treasurer who is occupied with the financial accounting activities. In a pretesting study (Christiaens 1996a) one municipality even had an Alderman in the function of accounting Executive, who monitored the financial accounting activities. In order to avoid problems in filling in the form or resistance to respond, the questionnaire is made easy in that the part-timers may be regarded as full-timers. This is not completely correct but is a pragmatic approach.

Setting up the first subquestion of question III-1 allows to know the total number of accounting employees. There are no other means of drawing up the number of accounting employees, an alternative method might have been the membership of certain organisations or certain pay-roll codes of the

employee. However, this is not possible: it is not obvious which person is doing accounting.

8.2.4 Question III-2

In question III-2 a distinction is made between permanent consultants and consultants once-only. Possibly, accounting consultants have rendered services just considering the first drawing up of assets and liabilities or they just have formulated some advise. Such consulting activities do not represent a steady, permanent relationship.

Aiming at improving the response validity, the kind of relationship is checked by adding the "once-only" question.

Chapter 9: Measurement of variables

9.1 VARIABLES REGARDING RQ1 AND RQ2

The measurement of the variables with regard to RQ1 and RQ2 is integrated in Chapter 4: Concepts and constructs.

9.2 MEASUREMENT OF THE COMPLIANCE INDEX

Table 9.1 presents an overview of all the elements of the *compliance index* and of their method of measurement. The elements are mostly measured dichotomously with a score of 1 if applicable and a score of 0 if not. Some of the elements are measured qualitatively and just one is measured quantitatively.

The elements and their treatment in table 9.1 are commented in Chapter 4 Concept and constructs under the concept "Extent of compliance"; if necessary additional comments are provided after the table.

Table 9.1 Elements of the compliance index

Item	Code	Measure	Source
Timeliness a	TIME	Quant.	Q I-1
Completeness b			
Stocks disclosed	STOCK	Dich.	Ann. acc.
Doubtful debtors recorded	DOUBDEB	Dich.	Trial bal
Debtor taxes disclosed	DEBTAX	Dich.	Ann. acc.
Provisions disclosed	PROVIS	Dich.	Ann. acc.
Educational staff: salaries equals subsidies	SALEDU= SUBSAL	Dich.	Ann. acc.
Valuation c			
No starting value certain assets	STAVAL	Dich.	Ann. acc.
Cut-off d			
Deferred charges disclosed	DEFCHA	Dich.	Ann. acc.
Deferred income disclosed	DEFINC	Dich.	Ann. acc.
Accrued charges disclosed	ACCCHA	Dich.	Ann. acc.
Accrued income disclosed	ACCINC	Dich.	Ann. acc.
Classification			
Sign assets correct	SIGASS	Dich.	Bal. sh.
Sign liabilities correct	SIGLIA	Dich.	Bal. sh.
Sign P/L correct	SIGPL	Dich.	P/L acc.
Compensation e			
Amounts receivable within one year	COM4042	Dich.	Ann. acc.
Debts falling due within one year	COM43	Dich.	Ann. acc.
Trade creditors	COM44	Dich.	Ann. acc.
Taxation, salaries and social security	COM45	Dich.	Ann. acc.
Other amounts payable	COM46	Dich.	Ann. acc.
Accruals/deferrals	COM49	Dich.	Ann. acc.
G/L account 62401 applied	62401	Dich.	Trial bal
Mechanical accuracy			
Reconcilitation results f	RECRESU	Dich.	Trial bal
Reconcilitation reserves g	RECRESE	Dich.	Trial bal
Investment subsidies h	INVAMOC	Dich.	P/L acc.
Cumulated amortisations i	AMOINVC	Dich.	P/L acc.
Promissed subsidies j	SUBPROM	Dich.	Trial bal
Redemption loans 64=765 k	64=765	Dich.	P/L acc.
Redemption loans 665=74 l	665=74	Dich.	P/L acc.
Invoices in suspense m	492=447	Dich.	Bal. sh.
Subsidies 270/274 n	270 4>= 1714	Dich.	Bal. sh.
Loans agreed 275 o	275>= 172	Dich.	Bal. sh.

Table 9.1 Elements of the *compliance index* (continued)

Item	Code	Measure	Source
Disclosure			
Valuation rules disclosed p	VALRUL	Qual.	Notes
Fixed assets movements schedule q	MUTTAB	Qual.	Notes
Adjustments capital r	MODCAP	Dich.	Notes
Details and statements of loans	COPLOA	Dich.	Notes
Details investments s	DETINV	Qual.	Notes
Details accruals deferrals t	ACCDEF	Dich.	Notes
Details III.25 and IV.27	INVSUB	Dich.	Notes
Details amounts receivable	DEBTOR	Dich.	Notes
Details capital and reserves	NETWOR	Dich.	Notes
Details granted subsidies	VINVSU	Dich.	Notes
Details creditors	CREDOR	Dich.	Notes
Details capital gain/loss disposal fixed assets u	REAFXA	Dich.	Notes
Details P/L account: costs	DETCO	Dich.	Notes
Details P/L account: revenues	DETRE	Dich.	Notes
Trial balance v	TRIBAL	Qual.	Notes
Contingencies disclosed w	CONTIN	Qual.	Notes
Previous year figures	ONEYE	Dich.	Bal. sh.
Formalistic requirements			
Statement 173X tax	ST173X	Dich.	Notes
Statement Cadastral Revenues	CADINC	Dich.	Notes
Statement deferred appropriations (Form T)	MOD11	Dich.	Budg acc
Statement decreed claims receivable	RECEIV	Dich.	Budg acc
Mod 15A	MOD15A	Dich.	Notes
Mod 15BC	MOD15BC	Dich.	Notes
Mod 15D	MOD15D	Dich.	Notes
MOD 15E x	MOD15E	Qual.	Notes
MOD 15F	MOD15F	Dich.	Notes
Summary budgetary result and accounting result	SYNBUD	Dich.	Notes
Reconciliation budget. acc. result with financial accounting result	BUCORE	Dich.	Notes
Comparison budget-budg. acc.	BUDABU	Dich.	Notes
Adequacy and usefulness			
Guidelines annual accounts	EDUREA	Dich.	Ann. acc.
Analysis budgetary accounts	ANABUD	Dich.	Notes
Analysis annual accounts	ANAFIN	Dich.	Notes
Pictorial, graphical presentations	PICGRA	Dich.	Notes
Different colours	DIFCOL	Dich.	Ann. acc.
Pages consecutively numbered y	PAGCON	Qual.	Ann. acc.

There are totally 66 elements of the compliance index resulting in a score of 67 points. Comments are reported below.

a Timeliness

The timeliness is measured per month in a linear¹⁹⁴ way as indicated in the following table.

Table 9.2: Scores timeliness

Month of enactment	Score
March 1996	1
April 1996	0.9
May 1996	0.8
June 1996	0.7
July 1996	0.6
August 1996	0.5
September 1996	0.4
October 1996	0.3
November 1996	0.2
December 1996	0.1
January 1997	0
February 1997	0
March 1997	0
April 1997	0
Not finished	0

b Completeness

In Question II-3 the respondents are requested to describe the balance sheet items which were left out of the recording in the first balance sheet. These omissions are discussed in the findings of RQ1 and RQ2, but they are not included in the *compliance index* because of the validity threats (see Chapter 4: Concepts and constructs, section 4.1.3.2 Completeness).

c Valuation

An additional question could have been: Has the obligatory yearly revaluation of the immovables taken place according to the correct valuation rule? However, this item is not selected since the question can only be answered for 67 of the 100

¹⁹⁴ A linear scale attributing discrete points was also the approach of Volmer (1992, p. 35).

municipalities. For the others there is a lack of specific data. Nevertheless this question is approached by RQ1 and RQ2.

d Accruals and deferrals: if accruals, deferrals are recorded then a score of 1 is attributed, otherwise the score is 0. In the case of an occurrence of mistakenly negative amounts, the outcome is not awarded and a score 0 is attributed.

e Classification: compensation

If a compensation and a mistakenly negative sign occur together, the compensation will not be sanctioned to avoid double counting¹⁹⁵.

For each of the elements the approach is dichotomous; it is mainly the attribute of being in compliance with regulations and principles which counts, the differences in values are not prevailing.

f Reconciliation of the results: this test covers the balance sheet and P/L account irrespective of the items in the trial balance. In case of a non-disclosure of the appropriation account it goes without saying that the reconciliation cannot be approved and that a score 0 is attributed.

g Reconciliation of the reserves: this test covers the balance sheet and P/L account irrespective of the items in the trial balance. In order to obtain a score 1, both parts Ordinary reserves and Extraordinary reserves have to be in compliance.

h Investment subsidies, donations and legacies: the sum of the amortisations may not exceed the capital amount. The 9 lines of testing should be simultaneously in compliance in order to receive the score of 1 on this test.

i The sum of the cumulated amortisations at the end of the year over the different items has to exceed the current

¹⁹⁵ See also Chapter 4, 4.1.3.7 Classification a), b), c).

amortisation in the P/L account

j The disclosed promised subsidies must not exceed the (obtained) investment subsidies in capital of a higher government or of other governmental institutions:

$27041 \leq 15411$ and $27061 \leq 15611$

In order to obtain a score 1, both formulas have to be in compliance (fulfilled).

k The amounts I.E. 64 *Redemption of loans* and IV'C' 765 *Adjustment redemption of loans* should be identical.

l The amounts IV.D. 665 *Adjustment of the accounts* concerning the repayable redemptions of loans should be equal to I'D' 74 *Redemptions of loans receivable*.

m The balances of the accounts 49200 *Invoices in suspense for charging* and 44700 *Invoices to be charged* should be of the same amount.

n Necessary relationship: IV.A. *Promissed subsidies receivable* 270/274 $\geq$ VII'B' *Loans at the expense of a higher government* 1714.

o Necessary relationship: IV.B. *Admitted loans* 275 $\geq$ VII'C' *Loans agreed by third parties* 172.

p Valuation rules

In order to measure the extent of compliance, there is chosen for a qualitative scoring of the valuation rules. The subjects of the rules and the categories of information they are covering are deemed to be more representative than the length of the rules.

The occurrence of each of the 6 categories is attributed a score of 0.4 in the compliance index with a maximum compliance score of 2.0.

This approach is quite arbitrary but taking the length as a

basis for the score is less advisable:

- A first difficulty in scoring the length is the creation of a correct definition of which lines of text in the Notes belong to a valuation rule vs. which lines are nothing more than a description, a comment or a clarification.

- A second weakness related to the length is that it is most likely that the length is positively biased by the size of the municipality. Robbins & Austin (JAR 1986) took only cities exceeding 50,000 citizens, which mitigates this validity remark, but in Flanders where the municipalities are strongly differing in size, there is reason to believe that the length of disclosure is positively influenced by the size of the municipality because larger municipalities have a lot more items to provide details on and a lot more detailed information.

In summary,

<u>Attribute</u>	<u>Score</u>
a/ Valuation	0.4
b/ Revaluation	0.4
c/ Depreciation	0.4
d/ Amortisation	0.4
e/ Other	0.4
f/ Detailed per item	0.4
max. score	2.0

q Fixed assets movements schedule: the scores are attributed as follows:

- Disclosed per "nature" in conformity	1
- Disclosed but not per "nature"	0.5
- Not disclosed	0

r Adjustments of initial capital

Even in the case of no recorded adjustments, the municipality is supposed to report on this item.

s Details of the investments: the scores are attributed as follows:

- Disclosed in conformity	1
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- Disclosed without number of shares or without unit price per share 0.5
- Not disclosed 0

t Details accruals and deferrals: a pretesting study (Christiaens 1997, p. 28) revealed that the comments in the Notes are very poor and that a number of Flemish municipalities merely provide comments on the level of the account. This means that only the account information serves as a comment without any further information. Such details are not in conformity with accounting requirements.

For municipalities having zero balances in their accrual and deferral accounts the same approach as above is maintained. They should have commented on the accruals and deferrals, even if a zero balance occurs.

u Capital gains/loss on disposal of fixed assets: a methodological problem the study has run into is the case in which capital gains or losses did not occur or were not recorded.

A first solution to deal with this problem is to disregard this *compliance index* element only for such municipalities, but then the reference framework of the *compliance index* is no longer identical for each municipality.

A second approach is to assume that municipalities should always disclose comments on the balances of the accounts 67241 *Capital losses on disposal* and 77241 *Capital gains on disposal* on a regular basis, even if zero-balances may occur. This is a literal interpretation of the *Circular Letter BA/FB 96/3* which states that the balance has to be justified by an overview of the capital gains and losses on disposal. As a matter of fact, there is the example of one municipality which had no gains or losses but which has complied with the obligation to report this. Moreover, announcing that there were no capital gains or losses is providing more information than disclosing nothing at all. In the sample 18 municipalities had no balances for the accounts 67241 and 77241. A final motivation for attributing a zero-score might be the fact that among those

municipalities there are some medium-sized municipalities for which non-disclosure of a balance could be due to the non-recording instead of the non-occurring.

v Trial balance: the scores are attributed as follows:

- Trial balance in compliance	1
- Trial balance limited to balance sheet accounts or limited to P/L accounts	0.5
- No trial balance disclosed	0

w Contingencies (commitments, guarantees)

If all commitments and guarantees including claims, litigations, etc. are disclosed then a score 1 is attributed. If the contingencies are limited to bank guarantees, a score 0.5 is attributed and the score is 0 if nothing is disclosed.

x Certification by Municipal Treasurer art. 39, par. 6 NARGC: there are two different kinds of disclosures: there are the ones with just a formal statement in a few fixed sentences, but there are also municipalities showing an overview of the actual figures. Therefore, the *compliance index* will be tuned to take these differences into account, as follows:

- Long form	1
- Short form	0.5
- No disclosure	0

y Pages consecutively numbered: the scores are as follows:

- Completely	1
- Partly	0.5
- No	0

9.3 MEASUREMENT OF THE DETERMINANTS x_i

The measurement and scaling of the possible determinants (x_i) of the extent of compliance are incorporated in the next section concerning the methods of analysis.

9.4 MEASUREMENT OF THE COMPARABILITY

The measurement of the comparability is also detailed in the section concerning the methods of analysis.

Chapter 10: Methods of analysis, statistics

10.1 DESCRIPTIVE STATISTICS

10.1.1 Descriptive analysis

The several empirical issues of the adoption and implementation of the accounting reform will be analysed from a descriptive and explorative point of view. The analysis is mostly concentrates on the frequencies of the different findings and on characteristics of municipalities.

10.1.2 Additional statistical tests

Apart from the descriptive statistics, some significance tests will additionally be performed.

Concentrated on the issue timeliness of the annual accounts, the assumed associations with a number of indicators will be tested using Mann-Whitney U tests. The considered categorical indicators will be experienced municipalities, having accounting employees with a business experience, having called in permanent accounting consultants, having trained accounting personnel.

This test is appropriate since the data regarding the timeliness are ordinal and there are a series of two independent samples.

The relationship size of the municipality and timeliness can be approached by a single linear regression since the scales are at least interval-scales and a t-test on Pearson's correlation coefficient seems suitable. Using a similar t-test, the relationships of the municipal debt per capita and a few other surrogates with the timeliness will be tested in order to measure the impact of "good news" on the timeliness.

The legal valuation rule applicable for networks contains two

options: production value vs. current cost per m * length of the network. Particularly for the valuation of sewers the impact of different valuation rules and the actual valuation will be determined by a t-test on the average value of the sewers with respect to the number of citizens. A parametric t-test is deemed suitable since the 2 scales are ratio-scales and the assumption of a normal distribution is acceptable.

In order to test the association of certain occurrences with categorical factors X^2 tests will be applied. The occurrences are:

1/ the recording of pension contributions on the appropriate account 62401 *Employer's contributions to the fund for municipal pensions*. The testable categorical factors are the factor experience of the municipalities, having called in professional accounting consultants or not, bookkeepers with a business accounting experience.

2/ The same categorical factors are tested in respect of the recording of accruals/deferrals.

3/ Whether or not the municipality is in compliance with the revaluation rules is tested over the different softwarehouses to measure the effect of the kind of software.

The X^2 tests are appropriate in these cases since the scales of these data are categorical. If the conditions considering the needed minimum of occurrences in respect of the number of degrees of freedom are not fulfilled, the X^2 test is accordingly replaced by a binomial test.

Yet, the results provided by these additional/ secondary statistical techniques should not be overestimated in these additional tests. Indeed, these tests are not meant as being a mathematical-statistical proof of a theory; the aim is just to focus on some situational indicators.

10.2 OLS REGRESSION ANALYSIS

The associations proposed in the hypotheses H_{30} through H_{36} were tested using ordinary least squares regression analysis. The examined dependent variable is the *compliance index* (CI) as constructed in previous sections. The explanatory model includes all posited determinants affecting the *compliance index*.

The associations can be expressed as:

$$CI = f (EXPERI, ORMNFPO, CONSU, GEWONTV, STAFF, PROVSTAFF, BIB, EXBUSDICH, TRAIN, DEBTPC, OWNREV, POPUL)$$

The different determinants are defined and described earlier. The predicted signs for all determinants are presented in table 10.1.

Table 10.1: Description and prediction of variables

Independent variable name	Predicted sign	Description
<u>Possible determinants</u>		
<u>Experience</u>		
<i>EXPERI</i>	+	Dummy, coded 1 if municipality is experienced, 0 otherwise
<u>Accounting and auditing relationships</u>		
<i>ORMNFPO</i>	+	Dummy, coded 1 if municipality disposes of at least 1 "ordinary" municipal enterprise or municipal NFPO, 0 otherwise
<i>CONSU</i>	+	Dummy, coded 1 if permanent support by one of the two professional accounting consultants
<u>Engagement</u>		
<i>GEWONTV</i>	+	Dummy, coded 1 if Regional Treasurer, 0 if Municipal Treasurer
<u>Professionalism accounting staff</u>		
<i>STAFF</i>	+	Compound score (see concepts and constructs)
<i>PROVSTAFF</i>	+	Compound score (see concepts and constructs)
<i>BIB</i>	+	Dummy, coded 1 if at least one accounting employee is member of BIB or IDAC, 0 if no one is member
<i>EXBUSDICH</i>	+	Dummy, coded 1 if at least one accounting employee has business experience
<i>TRAIN</i>	+	Dummy, coded 1 if at least one accounting employee was enrolled for training
<u>Reliance on debt</u>		
<i>DEBTPC</i>	+	Long term debt per capita 1995
<u>Municipality wealth</u>		
<i>OWNREV</i>	+	Own revenue per capita 1995
<u>Municipal size</u>		
<i>POPUL</i>	+	Population 1995

10.3 COMPARABILITY

In order to measure quantitatively the extent of comparability a number of indices have been developed. Different research efforts to this respect are presented in an overview by Van der Tas (1995, p. 5-8). Without being complete there are the H-index¹⁹⁶, I-index¹⁹⁷ and C-index, of which the **C-index** is in many respects preferent and will be applied in the present study.

The C-index introduced by Van der Tas (EAR 1992, p. 74) "measures the degree of comparability for each item in the financial reports" based on the number of permutations (i.e. the number of comparable pairs of accounting output related to the total number of pairs of accounting output).

Fig. 8: C-index formula

$$\text{C-index} = \frac{a_1^2 + a_2^2 + \dots + a_i^2 + \dots + a_m^2 - n}{n^2 - n}$$

a_i = the number of municipalities applying method i
 m = the number of alternative methods
 n = the number of municipalities

The C-index ranges from 0 (0% comparability) to 1 (100% comparability, in which case all combinations of pairs of municipalities are comparable with respect to a certain item because they all apply the same method).

One should be careful for a number of **threats** when applying harmony indices, particularly the C-index:

* As mentioned before in the definition, the C-index measures

¹⁹⁶ The Hirschman-Herfindahl index (H-index) is actually a concentration index and has some limitations which are often quoted (Van der Tas EAR 1992, p. 73).

¹⁹⁷ The I-index was developed for measuring between country harmony (Van der Tas 1995, p. 7).

the comparability of 1 event (= item) only, i.e. 1 accounting method or 1 practice or 1 assertion.

It is not possible to measure an aggregate of all the different accounting practices through the C-index: the comparability has to be conducted on an **item by item level**¹⁹⁸.

This inability of summarizing the individual degrees of comparability into a single measure of the overall degree of harmony was also described by other authors (Christiansen 1995, p. 3; Archer & McLeay 1995, p. 2).

This conclusion is very important in that it will prove impossible to assess an overall comparability of the municipal annual accounts. The comparability will be executed on an item by item level. An example may illustrate this reasoning:

Practically, the comparability issue of municipal stock is far less important than the comparability issue of provisions for risks and charges. However, there is no scientific solution to join them.

As preliminary suggested by Van der Tas (ABR 1988, p. 167) a possible hypothesis might be to create an overall comparability index based on a weighting of the individual indices. A suggestion might be to weight in function of the monetary amounts of the different items.

* Another problem when applying the concept of a C-index is that the **presupposed differences** (Van der Tas ABR 1988, p. 166) between alternative accounting methods are of the same size.

For example, investments might be valued at the historical value (A), at the current called up share capital value (B) or at the current intrinsic value (C). Applying the C-index approach means that the differences A-B, A-C and B-C are supposed to have the same importance.

¹⁹⁸ Van der Tas is aware of this weakness and he encourages further research in developing an overall degree of harmony (Van der Tas 1995, p. 12).

This need not to be so in reality: some alternatives could be closer than other alternatives (e.g. A-C could be more narrow than B-C). An extreme example would be the case in which the named accounting methods are different but in which the resulting values are almost identical. Using the C-index would lead here to an important lack of comparability whereas in reality the methods revealing the same results are perfectly comparable.

* The C-index is said (Van der Tas EAR 1992, p. 77) to satisfy the criteria of a **ratio-scale**, thus enabling the researcher to apply regression analysis as a test of significance in longitudinal studies. However, for cross-sectional studies one could wonder why these significance tests on the C-index have not been developed.

* It needs to be remembered that "the C-index does not provide insight into the explanatory factors leading to a high or a low degree of harmony." (Christiansen 1995, p. 5)

Undoubtedly, using the C-index approach has a number of **advantages**:

* A major advantage is the ability "to measure the impact of the activities of accounting standard setting bodies" (Van der Tas 1995, p. 4). It will be interesting to investigate whether the **standards-setters** did actually make any progress in their business-like accounting reform with regard to the pursued comparability of the accounting output in the Flemish municipalities.

Applying the C-index could also be taken over by the standard-setters and regulators for setting goals in respect to the decided degree of harmony. Comparison of the factual situation and results with the pursued goals and feed-back then becomes possible.

* A second advantage is the ability "to identify problem areas in terms of accounting items needing attention" (Van der Tas 1995, p. 4).

The C-index tool for determining the level of harmony and comparability has been used in a number of studies in a business environment, albeit very scarcely in governmental accounting research. An example of such a study is an international comparative study in governmental accounting carried out by Pina & Torres (CIGAR 1995). the latter compared the annual accounts of six countries (viz. Australia, New Zealand, Canada, USA, Sweden and Spain).

Chapter 11. Pretesting and pilot studies

11.1 OBJECTIVE

A preliminary limited field-study was conducted in order to be able to understand better the typical position, persons and habits of the accounting systems in a municipal environment. This preliminary field-study also has the advantage that it is:

- a "walk through" to understand better and more technically the phenomenon of the accounting reform,
- a method of fine tuning the study and the survey-instrument,
- a method for a better understanding of typical municipal activities,
- a way of gathering practical experience.

However, such an observation remained nonparticipatory; there is no manipulation of variables whatsoever.

11.2 ACTIVITIES AND FINDINGS

A wide number of preliminary interviews were conducted, particularly with representatives of the specific softwarehouses for municipality accounting and administration. There are about 9 such softwarehouses in Flanders, of which the 4¹⁹⁹ most important were approached. The softwarehouses were already used to work for municipalities in that they were also responsible for the software for budgetary systems and for administrative tasks.

Apart from some single contacts, the Big Six Offices have had no important relationship with municipalities. Apparently, in Flanders only 2 important professional external accounting

¹⁹⁹ CEVI, CIPAL, NV Schaubroeck and VLABRIC.

consultants (i.e. Moores & Rowland and Euraccounts²⁰⁰) are operating, of whom one was interviewed.

From the point of view of internal consultants and experts a former Municipal Treasurer being now an author and a consultant (Union of Flemish Cities and Municipalities) have been interviewed. The Municipal Treasurers²⁰¹ of 7 municipalities, of which 3 experienced municipalities have been interviewed a couple of times mainly to explore the environment, the accounting attitudes and to become aware of the typical financial and administrative characteristics. In the present study 3 of those 7 municipalities are included in the sample of Flemish municipalities.

Finally, Executives charged with controlling and auditing the municipal accounts in the Provincial Oversight Bodies of 2 Provinces (West- and East Flanders) were also interviewed. The Oversight Bodies did not seem to have started the organisation of reforming their control and audit approaches yet. Their focus was on becoming aware of the new financial accounting system and on learning the accrual accounting techniques.

Fortunately, there was certainly a willingness to cooperate and a number of the interviewees were pleased with some interest of the academic world. This pretesting revealed a certain satisfaction in the mind of the Municipal Treasurers although the accrual accounting principles were not always easy to understand for them. They seemed to expect quite a lot of the new system and they were very interested in the expected usefulness.

Technically, it became clear that the municipalities cope with a number of accounting difficulties (e.g. boundaries of the municipality), that the first drawing up of assets and

²⁰⁰ Since approximately September 1996 the division Public Sector of Euraccounts is taken over by the Big Six Office Ernst & Young Accountants.

²⁰¹ In one important municipality it was the Alderman of Finance and his assistant who were interviewed instead of the Municipal Treasurer.

liabilities has been a heavy, expensive task and that the accounting practices are very diversified. Each municipality seemed to interpret the regulations more or less individually.

This preliminary study has resulted in a paper which has been submitted for the EIASM Workshop on the Role of Accounting in the Public Sector, Stockholm, 7th-8th November 1996 and for the Seminar New Public Sector in Edinburgh, 16th-17th December 1996.

Part III. Results, interpretations and conclusions

Chapter 12: Municipal accounting practices: technical, conceptual characteristics

12.1 SUPREMACY OF THE TRADITIONAL BUDGETARY ACCOUNTING SYSTEM

The new accounting system is strongly inspired by business accounting. The applied conceptual framework is intended as almost a copy²⁰² of business accounting. It is mainly in the practical working out of the municipal accounting system that differences with business accounting occur. These differences are mostly due to the dominant frame of the budgetary accounting system which occupies a privileged position.

The traditional budgetary accounting system has not been abandoned. On the contrary: in several ways budgetary accounting is dominating the new financial accounting although the two systems have different targets. Thus several noteworthy consequences occur.

12.1.1 Obligatory link

Except for some non-cash costs and revenues every journal entry in financial accounting has to be accompanied by the corresponding journal entry in budgetary accounting. This obligatory technical combining of budgetary and financial accounting, which are in many respects incompatible, creates a conflicting situation.

12.1.2 Recognition of costs

Due to the technical link between the two systems incurred costs are posted in the general ledger of the financial

²⁰² Without actually having examined the appropriateness and without having applied governmental accounting know-how from other more experienced countries.

accounting only if they are being charged to the budgetary accounting²⁰³. Knowing that the charging of the budget mostly depends on the availability of a budget, on the occasional tendency towards deferring to next year's budget, etc. implies that in financial accounting the compliance with general accounting principles is not prevailing²⁰⁴.

12.1.3 Written off amounts

Regarding debtors, stocks, accounts receivable and other current assets, written off amounts are never charged²⁰⁵ in the P/L account before their final run-off. For example, doubtful accounts receivable can indeed be recorded as a separate asset, but an estimated charge to P/L shall not be recorded until the run-off which has to be legitimated by the according piece of evidence, takes place. This piece of evidence has an external origin or is created by an internal official decision to give up the account.

12.1.4 Double counting loan redemption

The payment of a redemption of a loan is recorded in the budgetary accounting as an expenditure. At the same time this

²⁰³ This charging (= "aanrekening") always depends on an administrative decision. Translated from the annual accounts of a municipality a cost occurs at the moment of "aanrekening". A revenue occurs at the moment of the decision to demand. In other words, the realisation of a purchase/cost is legally supposed to happen at the time of the invoice's approval, not at the time of the incurring of the purchase/cost.

²⁰⁴ One could argue that this affects the adequacy of the P/L account since Municipal Executives are given a means to quicken or to slow down the charging of costs into P/L. A similar phenomenon could occur with regard to revenues.

²⁰⁵ An estimation of the loss regarding e.g. doubtful debtors is never made. The journal entry representing the loss is registered only if the loss has become definite (= "run-off").

redemption is charged²⁰⁶ in the P/L account due to the automatic link with the financial accounting system. Since the payment of the redemption is never a real cost, an adjusting journal entry has to be made using a revenue account of the kind of non-cash revenue for the same amount. This unusual method is similar for loans receivable. It is a technical inadequacy that affects financial ratios.

12.1.5 Recognition of bank loans

Instead of being entered as contingencies (rights) in the Notes, loan facilities or credit lines are recorded as a current asset with respect to the account creditors: falling due after more than one year. This journal entry is at the moment of the approval by the Municipal Council, not upon receipt of the official approval of the bank²⁰⁷ which could take a number of days. Thus rights and commitments are confused with assets and liabilities. The comparison with GAAP is shown in an fictitious example in table 12.1.

Putting the insertion in the balance sheet the wrong way can be explained by the budgetary point of view, in which an approved credit line is being recognised immediately and entered in the budgetary account without being subject to the actual withdrawals.

²⁰⁶ This charging is not intended to achieve a proxy for measuring capital consumption, it is just a technical inadequacy.

²⁰⁷ The bank providing the loans is in most of the cases Gemeentekrediet, which is a mutual bank established for local governments specifically in Belgium.

Table 12.1: Comparison accounting practices of credit lines

Business accounting	NARGC
<u>Approval bank:</u> No recording other then in the off-balance accounts	<u>Approval Gemeentekrediet:</u> 41303 Loans to withdraw 1,000,000 @ 17101 Loans 1,000,000
<u>Use of the funds:</u> Receiving proceeds: 55000 Bank 70,000 @ 1730 Bank loans 70,000 Payment supplier: 44000 Suppliers 70,000 @ 55000 Bank 70,000	<u>Use of the funds:</u> Payment supplier: 44000 Suppliers 70,000 @ 55006 GK: credit line 70,000
<u>Consequences:</u> The actual outstanding capital is disclosed as a liability The remaining credit facilities are disclosed off-balance	<u>Consequences:</u> The actual outstanding capital is negatively disclosed in the item 55 Cash at bank and in hand The negative cash at bank and in hand is overlapping with 17101 Loans

The taking out of the loan²⁰⁸ is not recorded as a debt on the liability side but as a credit balance on a specific account of the kind "cash at bank and in hand".

The consequences of the above are rather important. *Firstly*, assets and liabilities are mixed up with contingencies and therefore blown up. *Secondly*, the timing of the recognition is based on the approval of the Municipal Council, which need not to be in accordance with the official agreement date of the bank. *Thirdly*, the accounts cash at bank and in hand are compensated with the credit balances of withdrawals which are actually liabilities. Therefore, it is possible that the balance of the accounts cash at bank and in hand becomes

²⁰⁸ The not-taking out of the loan results in a commission of 0.25% payable in favour of Gemeentekrediet (Loots & Michiels 1996, p. 22).

negative without there being any problems of liquidity whatsoever.

12.1.6 Disclosure cash at bank and in hand

Due to certain traditions and to the imposed balance sheet model (MD 10th Jan. 1996), balances of cash at bank and in hand should always be disclosed on the asset-side of the balance sheet, even if credit balances occur²⁰⁹. This negative asset is likely to occur for two reasons.

Firstly, this asset contains the credit-lines always accompanied with a negative sign.

Secondly, municipalities have to record²¹⁰ outgoing payments as soon as the payment orders towards the bank are released by the Municipal Treasurer. The reason for this is of a budgetary nature. At the time of approval the budget is being charged, which implies the corresponding entry in financial accounting.

This obligatory financial accounting practice is traditionally unlikely to occur in business accounting although it is tolerated by a notice in the *Chart of Account* applicable for business accounting (RD 8th Oct. 1976).

12.1.7 Provisions for risks and charges

The item VI' *Provisions for risks and charges* is foreseen in the prescribed form of the the balance sheet as part of (belonging to) the group of capital and reserves (MD 23th Sept. 1991 modified by MD 10th Jan. 1996)

²⁰⁹ Loots & Michiels 1996, p. 14.

²¹⁰ This is done by means of the accounts of the group 58xxx as foreseen in the *Chart of Accounts*.

Art. 8 NARGC defines the item as follows: "If the taxation is moderate and the budgetary means are sufficient, the Municipal Council can put aside budgets in order to fund provisions for risks and charges which might have an influence through different years on the patrimony."

This definition is striking in several respects and appears to be driven by budgetary accounting decisions and not by financial accounting reality.

First of all, the setting up of provisions is mistakenly defined as a **possibility**, not as an **obligation**. Thus, it depends on a decision and not on the economic reality.

Secondly, provisions for risks and charges are made **conditional** referring to the financial soundness of the municipality. Thus, only municipalities which are financially sound may set up provisions; the unsound municipalities are not allowed to do so. This procedure disregards the economic reality and the necessity of the provision. This conditional aspect is also criticized by Verbeken (1995, p. 21).

Thirdly, the underlying aspect **"future"** seems to be misunderstood. Both the activity leading to a provision and the payment also are seen in the future. This point of view is misleading. The activity implying a provision occurs in the current year. Therefore the P/L account should be charged in the current year with an estimated cost. It is the run-off and thus the financial settlement which are going to happen in the future. The currently unknown and uncertain amount will be in development and will become a definite amount after balance sheet date. The remark for the term **"might"** is similar. If the cost is incurred in the current year, then consequently there is certainly an influence on the patrimony (capital and reserves). It is the assessment of the real run-off which is to be estimated and then the term "might" can be used.

A fourth remark is the inclusion of the item Provisions for

risks and charges in the **Capital and Reserves**, which can seriously be criticized. In the form of the balance sheet prescribed for business enterprises this is a separate part on the liability-side between Capital and Reserves and Creditors (RD 8th October 1976). This is also the case in the accounting legislation for insurance companies (RD 17th November 1994) and autonomous pension funds (RD 19th April 1991). On the other hand, in the accounting regulations for hospitals (RD 14th August 1987) the item is defined as belonging to Capital and Reserves. Specialists²¹¹ in financial accounting in hospitals do not agree with this practice albeit legally defined. They argue that the contents of this item are actually liabilities and anyway not a part of the Capital and Reserves, which is principally also the point of view in this dissertation.

In art. 19 NARGC the legislator remained very vague about the accounting practices regarding provisions. Art. 19 NARGC stipulates that the inventory should be made of all goods, properties, rights and claims as well as subsidies and creditors. It is remarkable that the term obligations or provisions is not literally included.

However, the following motivations support the recording of provisions:

- derived from business accounting with its "true and fair view", NARGC aims at showing a complete view of assets and liabilities and at informing the stakeholders in a more complete and objective way (Report to the King concerning RD 2nd August 1990, p. 2-3);
- according to NARGC rights and commitments have to be disclosed in the Notes (MD 23th September 1991);
- different authors stress the accounting principle of

²¹¹ Jegers (1993); Van Herck (1996).

completeness²¹²;

- the need for disclosing the latent pension obligations due to the not having set aside the pension contributions (7.5% of the salaries) is put on the forefront²¹³.

In the regulations and also in the rather scarce literature the implementation and recording of provisions is treated in a stepmotherly way (Redant 1995, p. 80). For example, Martens, Umans & Blomme (1992, p. V-77-V-79) casually discuss the example of provisions for the coming maintenance of a swimming pool and a cultural centre in an approach imitated from business accounting. In their example Bodarwé & Laurent (1992, p. 140) just present some general journal entries and all the authors keep their options open in this area.

The importance of the Provisions for risks and charges actually implying the charging of Capital and Reserves cannot be denied in a patrimonial view in cases of:

- * Pension provisions;
- * Provisions for litigations and claims at the expense of the municipality and other provisions;
- * Provisions for OCMW-hospital deficits.

²¹² Martens, Umans & Blomme 1992, p. I-66, II-2.

²¹³ Redant 1995, p. 77-78.

12.1.8 Accruals and Deferrals

12.1.8.1 Business accounting

In business accounting²¹⁴ the accounts registering accruals and deferrals are defined as follows:

X. ASSETS	X. LIABILITIES
<hr/>	
<u>Accruals and deferrals</u>	
490 Deferred charges	493 Deferred income
491 Accrued income	492 Accrued costs
 <u>Suspense accounts</u>	
499 Suspense accounts	499 Suspense accounts
<hr/>	

Accruals and deferrals are actually "adjustments" of the P/L account and nothing else:

- costs, revenues which have to be **deferred** to the next year because they are actually earned ("realised") in next year, or
- costs, revenues which will become manifest in next year but which have to be **accrued** ("anticipated") in current year because they are actually incurred in current year.

A typical example is an insurance contract or renewal starting on 1st November 19N0 and with the premium payable in advance: obviously 10/12 of the premium is going to be deferred to the next year 19N1.

Suspense accounts have actually nothing to do with accruals or deferrals. They can become necessary as a provisional counterpart of activities which are not yet clear to account definitely, e.g. an amount as noticed on the bank statement is

²¹⁴ According to the Chart of Accounts (RD 8th October 1976).

received without knowing exactly the debtor who paid it nor the reason for the payment and without recognising the amount either. Of course, if the situation is clarified in the meantime, the suspense account has to be adjusted as far as possible in order to comply with the subsequent events. The result will normally be a balanced suspense account as to the balance sheet date.

Thus, the appearance of unbalanced suspense accounts at year end points out that the financial accounting output is unfinished and incomplete. Actually, unbalanced suspense accounts could be called a sort of disguised assets, liabilities, costs or revenues which have not yet been acknowledged and are in suspense for an adjustment.

12.1.8.2 Municipal accounting

In the accounting regulations for municipalities deferrals and accruals are regulated by art. 24 RD 2nd August 1990:

"If costs and revenues are related to next financial year, they should be charged ("aangerekend") by means of accruals and deferrals not having an impact on the P/L of the financial year itself."

Focusing on art. 24, it can be noticed that the legislation only regulates deferrals and not accruals. However²¹⁵, in the *Chart of Accounts* (MD 25th March 1994) the accounts representing deferrals as well as accruals are announced and legitimated²¹⁶ as follows:

²¹⁵ Redant (1995, p. 73-75) has also formulated this remark referring to examples of deferrals and accruals worked out in the handbook Umans, J. & Umans, M., "Inleiding tot het algemeen boekhouden voor gemeenten".

²¹⁶ Martens, Umans & Blomme 1992 are also giving examples of both deferrals and accruals.

X. ASSETS

X' LIABILITIES

Accruals and deferrals

49010 Deferred charges

49030 Deferred revenues

49020 Accrued revenues

49040 Accrued charges

Suspense accounts49200 Invoices in suspense
for charging

49500 Receipts to identify

49600 Payments to identify

49501 Receipts registered in the
subjournals²¹⁷49900 Prepayments of
interests

49700 Receipts to allocate

49800 Amounts improperly
received49999 Disposal from previous
budgetary accounting²¹⁸49999 Disposal from previous
budgetary accounting

12.1.8.2.1 Conflicts

The accounts 49010, 49020, 49030 and 49040 can be called the "pure" accruals and deferrals. Principally they are very important in a patrimonial accounting system in order to cut-off more correctly the earned vs. the non-earned P/L. However, these G/L accounts are not fairly promoted and used by the municipal accounting staff and even advised against by some standard setters²¹⁹. The reason is probably that these

²¹⁷ 49501 Receipts registered in the subjournals is an account that should be balanced (Martens, Umans & Blomme 1992, p. V-84) at balance sheet date.

²¹⁸ The accounts 49999 Disposal from previous budgetary accounting are a suspense account and are just meant to facilitate the installation of the adapted accounting system.

²¹⁹ Martens, Umans & Blomme 1992, p. V-60 "have heard it said that" principally these accounts should not be used. Unfortunately they published no further motivation. This reasoning was taken over by Loots & Michiels 1996, p. 15. In the Guidelines Nuttynck 1996 p. 12 the use of these "pure" accruals and deferrals is also advised against except for the account 4903 Deferred income. The mentioned reason would be the coherence with the budgetary accounting system.

accruals and deferrals are perceived as creating conflicts with the traditional budgetary accounting system.

Indeed, in a budgetary accounting system it does not matter when a cost or an income is earned; what matters is when it is to be charged on a budget; the pattern of charging the budget differs a lot with the pattern of matching costs and revenues to the P/L account, which is driven by financial accounting principles.

12.1.8.2.2 *Suspense accounts*

According to the *Chart of Accounts* (MD 25th March 1994 modified by MD 29th April 1996) the two balance sheet items accruals/deferrals consist of some accounts which are principally **suspense accounts** as is also likely looking at their names.

The remark as mentioned above in business accounting remains: they are not real accruals and deferrals since they represent underlying assets, liabilities, costs or revenues which are in suspense for the next step in the administrative procedure or for an adjustment. The reason why they are in suspense is not the simple fact that their real background would not be known as in a business environment, but they are not yet through the juridical and procedural cycle of the municipality. Apparently, just an internal qualification fully influences the annual accounts.

A first particular application of the suspense accounts is the account 492 *Invoices in suspense for charging*. The charging ("aanrekening") of invoices **should** be executed until 15th February 19N1 (art. 73 NARGC), but actually **could** be executed until ultimately 28th February 19N1 (i.e. final date on which the annual accounts have to be signed and sent to Mayor and Aldermen art. 78 NARGC). Apparently, charging the invoices is legally restricted to 15th February 1996, even if the invoice is made ready

to enter on e.g. 20th February 1996.

Therefore, invoices concerning 1995 which are not charged by 15th February 1996 at the latest should be recorded on the suspense account 49200 *Invoices in suspense for charging* in respect of the trade creditors called 44700 *Invoices to be charged*²²⁰. In terms of general financial accounting principles the recording of the creditors is fair enough, but the deferral of their charging to the next year is not in conformity with GAAP.

A second application is the suspense account 49500 *Receipts to identify*. This account represents received amounts whose real identity has not yet been determined. "Determined" is not the same as "known": it is possible that the identity is already known, but due to procedures the determination is not yet executed. Examples are receipts for refuse/ garbage, passports from certain citizens. The account²²¹ 49600 *Payments to identify* is similar as the account 49500.

Thirdly, it is rather obvious that the accounts 49700 *Receipts to allocate* and 49800 *Amounts improperly received*²²² are actually debts and not real accruals and deferrals. Indeed, these accounts having a transit character does not imply that they would not be debts.

²²⁰ This journal entry has also been approved of by interviewing a Municipal Treasurer.

²²¹ According to Martens, Umans & Blomme (1992, p. V-61) and Loots & Michiels (1996, p. 15) this account 49600 also has to be applied for deferring the charge of the salaries of January 1996 of the fixed appointed personnel paid in December 1995. This application is not a criticizable suspense account, but actually a pure deferral of costs.

²²² The adjective improperly does not mean that this receiving is the result of a sort of some criminal offence. It has to do with the occurrence of receipts without previously having worked out certain administrative steps in the procedure regarding the transaction. Thus, it is still administratively impossible to attribute the receipts.

Fourthly, a typical use²²³ of the account 49700 *Receipts to allocate* is the registration of the receipts concerning acknowledged allowances/subsidies for certain appointed personnel called GESCO's.

A fifth application is the account 49900 *Prepayments of interests*. According to Martens, Umans & Blomme (1992, p. V-61) this account contains the already paid interests without having received yet the claiming bank statement. Or the amounts were falling due and then the payments is no prepayment; or the amounts have not already fallen due and then the payment represents an asset (debtor) until the claiming document arrives. This account is handled as a suspense account, but actually it is a kind of debtor, and certainly not an accrual or deferral. Probably this is due to a confusion between transitory, temporary accounts which are a kind of assets and liabilities and real accruals and deferrals which also seem to be transitory but actually are adjustments on P/L.

In summary, the suspense accounts are used to express the fact that certain flows are still not approved or that they are still in a kind of prestage in spite of the fact that they could have been adjusted by now from the point of view of the financial accounting system. But, apparently the municipal legislator prefers to mix up the point of view of financial accounting with the point of view of budgetary accounting including internal procedures. This practice could result in an important actually unnecessary level of suspense accounts.

It is noteworthy to mention that many of the characteristics above are due to a kind of juridical formalism. For example, a piece of evidence is often regarded as the activity itself, not as an indicator of an incurring activity or flow. This could lead to cut-off problems at year end and to the

²²³ Martens, Umans & Blomme 1992, p. V-84; Guidelines Nuttynck 1996, p.

disregarding of changes in value until the piece of evidence justifying the value correction has been created.

12.2 IDENTITY AND OWNERSHIP

Municipalities provide services in a complex socio-economic-administrative environment through different organisations. Most of these services are provided by the municipality itself or by legally separated, but related parties²²⁴ with an independent accounting system.

Apart from these organisations, a number of municipalities have service-providing **"ordinary" municipal enterprises**. This decentralised entity is a juridical part of the municipality but it has a separated²²⁵ accounting system which falls under business accounting²²⁶.

A resulting problem is the occurrence of overlaps and gaps of perceived **ownership** in the existing business accounting in the part *"ordinary" municipal enterprise* and the recently adopted municipal accounting in the part *"rest of the municipality"*.

Ownership and boundary problems may also occur with other external parties, such as the intermunicipal organisations (e.g. for water supply, distribution of television channels, etc.), OCMW's, Church Fabrics, Polders and Watercourses, Provincial Governments, Federal Governments, etc.

This problem of "ownership" is also run into in other countries e.g. in France (Perreault CIGAR 1995, p. 5).

²²⁴ See also Chapter 1, 1.1.2 Overview governmental sector.

²²⁵ Art. 5 MD 30th Oct. 1990, modified by MD 1st Feb. 1994.

²²⁶ According to art. 35 Regent Decree 18th June 1946, a municipality has to account for losses in the "ordinary" municipal enterprise if its reserves appear to be insufficient (Boverie, Suykens & Leroy 1995, p. 507).

12.3 ACCOUNTING MEASUREMENT PROBLEMS: "COMMUNITY ASSETS"

Except for the continuous value correction²²⁷ all fixed assets juridically belonging to the municipality are considered and treated as if they were financial economic business assets just like that.

This could indeed be the case for certain somewhat business-like assets such as:

- the copier in one of the offices: its services could internally be "invoiced" at a transfer price;
- the computer server: the CPU time could internally be priced;
- the sport centre: the use could externally be priced at an entrance fee;
- cafeteria: the products can externally be charged to the customers, ...

All such assets can somehow be "realised" in a financial economic sense; a valuation on the balance sheet seems reasonable.

However, a number of assets having only a cultural, social, artistic, historical, military background and function are actually not real business assets²²⁸ and their valuation can seriously be questioned²²⁹. They are not at all used in a financial economic perspective; they have no economic

²²⁷ See 12.5 VALUE CORRECTIONS ON IMMOVABLE PATRIMONY.

²²⁸ For example, it is not because a municipality owns a painting of Rubens in Town Hall with a worth 20 mio BEF according to experts, that the municipality is an enterprise in works of art. It has no sense to say that the painting is worth 20 mio BEF since it just serves the cultural, historical usefulness of Town Hall. The same painting owned by a trade company has indeed that worth of 20 mio BEF and it is indeed put on the balance sheet as a stock; for the trader it is not the painting itself and its surrounding which counts, it is just an investment intended to be sold and to result in a profit.

²²⁹ Engstrom (1985, p. 300) referred to Francis Oakey who had already in 1921 emphasized in his book *Principles of Government Accounting and Reporting* "the need for disclosing only those assets that are susceptible of expenditure". According to Engstrom Oakey had claimed that "the valuation of fixed assets has little significance as a measure of city's resources in the form of property, since it indicates nothing as to the value of the property to the community, namely, capacity for service". Surprisingly, even after several decades such interesting point of views have hardly come to the surface.

significance. On the contrary, their inalienable presence is costing the municipality a lot of maintenance and safeguarding.

Moreover, the reckless legal assumption of business assets is contrary to public sector accounting in other countries²³⁰ and contrary to ideas and suggestions²³¹ of conceptual framework researchers.

A separate concept of fixed assets, often called "*community assets*", has been launched (Pallot AAAJ 1992) based on specific properties such as:

- their lifetime is difficult to determine since such assets are not used in an economic way, but in a social, cultural, educational, military way;
- obligatory providing of services (a duty rather than a right);
- they cause cash-outflows rather than cash-inflows;
- utilized by a non-identified public instead of the municipal entity itself;
- non-exclusive public goods²³²;
- the monetary value is irrelevant, and also it is not readily determined;
- for most of public goods there is no market, they cannot be sold, there is no right to alienate, they cannot be stolen²³³;
- they cannot cover debts; ...

²³⁰ For local authorities in the UK a separate category "*community assets*" was created on 1st April 1994 (Allen CIGAR 1995, p. 5.)

²³¹ See also Lapsley AAAJ 1988, p. 27.

²³² Public goods can be defined as goods for which there is a "non rival consumption" (i.e. jointness of supply) among the users or there is rivalry but the users cannot or should not be excluded (Hartog 1979, p. 263). The economic consequence of public goods is an imperfect market leading to a lack of automatic pricing regulations, contrary to rivalry consumption with exclusion if no paying.

²³³ According to Cheng (CIGAR 1997) during her presentation about the reporting of capital assets, the possibility to be stolen or not has been the criterion to register capital assets or not in some governmental organisations.

Examples of "community assets" would be infrastructure assets, highways, sewers, cultural areas, historical buildings, museum exhibits, works of art, ...

In the imposed Belgian balance sheet model these "community-assets" are not distinguished from the business-like assets and they are not at all treated differently either.

In order to value them, there is a variety of imposed non-consistent valuation rules such as *historical value*, *construction value*, *estimated value*, *surrogated current cost value*, *judgemental value*, *insurance value* (for artistic patrimony if externally insured), etc. However, the concept or the frame behind these valuation rules is not made clear. Is their purpose:

- to know the current price in order to build or construct a new asset if necessary?
- to know the original historic investment and to delineate the accountability?
- to know the current commercial value aiming at selling the asset in the near future or at raising of finance?
- to know the basis for allocating the cost of the investment over different generations?
- to measure the performance of the asset combining its return with rent value aiming at further managerial improvements?
-

Therefore, valuating these kinds of properties is made very difficult to accomplish in practice. A "return on investment" approach is certainly not possible.

In summary,

- no distinction is made between the assets applied in a financial economic way and the assets only having a cultural, historical, artistic meaning and importance;

- private and public goods are not separated;
- assets built up in previous decades and centuries are not separated from assets carrying a financial investment;
- the new accounting reform deals with a number of unanswered basic valuation questions and problems regarding these "unusual" kinds of assets.

12.4 STARTING VALUE

In the first balance sheet a number of assets (e.g. intangible assets, live stock, ...) should not be valued (art. 1 MD 30th Oct. 1990, modified by MD 1st Feb. 1994). Such items are only to be recorded as assets if they are acquired after 1st January 1995.

The reason for this inadequacy is probably an attempt to avoid a number of inventory problems. However, a number of municipalities started earlier than 1st Jan. 1995 (i.e. experienced municipalities) and tried to record all kinds of assets exhaustively, irrespective of the year of acquisition.

12.5 VALUE CORRECTIONS ON IMMOVABLE PATRIMONY

Apart from a business-like depreciation system, municipalities have to revalue (+ or -) their immovable assets yearly based on the increase or decrease of a specific real estate tax rate for land (Opc) and on a certain construction price index for buildings (ABEX-index) (art. 21, par 1 NARGC, art. 4 MD 30th Oct. 1990, modified by MD 1st Feb. 1994)²³⁴.

Such an adjustment does not cause any budgetary problems since these non-cash effects are distinctly disclosed in the P/L account from cash effects that have to correspond to the budgetary accounting. Therefore, these revaluations are irrelevant to the budget, but they can have a serious impact on the annual accounts.

It is rather remarkable that the effects of adjustment of this kind of "current cost accounting" are registered unquestioningly and directly in the P/L account, regardless the real and permanent value, regardless of the actual earning power of the asset and even regardless of the prudence principle. Investigating the explanation of such a regulation

²³⁴ Following example might illuminate the technical issues based on Redant 1995, p. 37-38 ('000):
 Nature 214 Industrial buildings: municipal warehouse (year of acquisition 1960)
 The current insurance value of the warehouse is 72,636
 ABEX-index 1960: 65; 1994: 458

Situation first drawing up 1st January 1995

Calculated original value: $72,636 * 65/458 = 10,309$
 Revaluation surplus: $72,636 - 10,309 = 62,327$
 Cumulated depreciations to date: $72,636 * 35 \text{ years} * 2\%$ (lifetime legally 50 years) = 50,845

Journal entries:	
221411 Industrial buildings	10,309
221416 Yearly revaluation	62,327
@ 221418 Cumul depreciations	50,845
10000 Capital	21,791

Situation 31st December 1995

Suppose an ABEX-index increase leading to a current value of 73,636. This revaluation increase is taken into P/L; the depreciation is calculated as follows: $73,636 * 36 \text{ years} * 2\% = 53,018$
 The current depreciation becomes: $53,018 - 50,845 = 2,173$

Journal entries:	
221416 Yearly revaluation	1,000
@ 76120 Profit yearly revaluation	1,000
66021 Yearly depreciation	2,173
@ 221418 Cumul depreciations	2,173

did not immediately result in a basic reason²³⁵.

It is quite amazing that regarding doubtful debtors and other amounts receivable the written off amounts cannot easily be recorded before the non-value is decided, whereas in the value corrections of the immovable an upgrading of the value is recorded just like that without questioning the real earning of the revaluated amount.

²³⁵ According to an interviewed Municipal Treasurer the reason is the pursued equilibrium with the depreciations in the P/L account. A fictitious example might clarify this point of view: a building acquired in 1980 is estimated having a current value of 40 mio BEF; the next phase is recalculating the original value in 1980 using the ABEX price index and depreciation rate backwards, e.g. 23 mio BEF. One must have had in mind that revaluation and depreciation are each others opposite and thus both belong to the P/L account.

12.6 CAPITAL

The capital which is calculated as the rest of assets less liabilities remains principally unchanged after drawing up the first statement of assets and liabilities. Contrary to corporations, this capital does not represent the called up share capital representing the financial input of the owners. It is just the balance of the first drawing up.

Chapter 13: Municipal accounting practices: empirical findings and results

13.1 RESPONSE ANALYSIS AND SOME DESCRIPTIVE FINDINGS

The respondents were fairly willing to cooperate: 30 returned the information quite completely; 47 responded but were asked to send additional information; 18 municipalities needed to be contacted and permitted a personal visit and interview. The 5 remaining municipalities responded only partly since their annual reports are not yet finished (up to 30th April 1997). This makes the total response rate 100%. In similar studies²³⁶ the response rate varies from 27.1% to 100%.

The response rate in time was as follows: 35 responses after sending out the questionnaire on 20th November 1996; 36 replied after a 2nd request sent on 4th December 1996 and 29 responses during the follow-up by phone starting 20th December 1996 and a couple of weeks after.

Following tables give an overview of the characteristics and key-items of the sampled municipalities.

The frequencies regarding the municipalities which have started already one or more years before 1st January 1995 are shown in table 13.1.

²³⁶ See Appendix IV. Sample sizes municipalities.

Table 13.1: Experienced municipalities

Size Cat.	Total ^a experienced municipalities	Sampled experienced municipalities
1	-	-
2	1	-
3	3	1
4	1	1
5	8	4
6	7	3
7	5	2
8	-	-
	-----	-----
	25 100%	11 44.0%

^a Source: Nuttynck 1994.

Table 13.2 shows the sampled municipalities according to their softwarehouse and their province; the softwarehouses are ordered in descending frequency and the provinces are ordered geographically.

W-Fl. = West-Flanders
 E-Fl. = East-Flanders
 Fl-Bra = Flemish-Brabant
 Antw. = (the province) Antwerp
 Limb. = Limburg

Table 13.2: Softwarehouses-Provinces

Software\Provin.	W-Fl.	E-Fl.	Fl-Bra	Antw.	Limb.	Total
CEVI	7	19	-	-	-	26
Schaubroeck	11	3	8	2	1	25
CIPAL	-	-	1	15	8	24
GEMIC	1	-	1	4	2	8
VLABRIC	-	-	4	-	1	5
IN2	-	-	1	3	1	5
REMMICOM	-	-	2	2	-	4
ICL	-	-	-	-	1	1
Ceccoware	-	-	-	1	-	1
Data N/A	-	-	-	1	-	1
Total sample	19	22	17	28	14	100
Tot. municipal.	64	65	65	70	44	308
Total	29.7%	33.8%	26.2%	40.0%	31.8%	32%

CEVI, CIPAL and VLABRIC are a kind of regional intermunicipal organisations whereas Schaubroeck is in origin a private printing office for governmental organisations. This background information explains fairly well the span of clients over the different provinces. It also explains why Schaubroeck is represented in each province.

In table 13.3 the sampled municipalities are divided according to their accounting consultant and their province. The information regarding the consultants is derived from the survey in the 100 sampled municipalities. Only the "permanent" consultants are considered, not those who have conducted their support just once (e.g. consulting activities towards the initial balance sheet, occasional consulting, ...).

Table 13.3: Consultants-Provinces

Consult.\Provin.	W-Fl.	E-Fl.	Fl-Bra	Antw.	Limb.	Total
Euraccounts	1	10	6	3	1	21
Moore's & Rowland	2	2	3	8	1	16
BDO	-	1	2	1	-	4
VB Consultants	-	-	-	-	1	1
Subtotal	3	13	11	12	3	42
No consultant	16	9	6	15	11	57
Data N/A	-	-	-	1	-	1
Total	19	22	17	28	14	100

Euraccounts and Moore's & Rowland are principally public accountancy firms having a separate specialised Public Sector Division. BDO being a chartered accountant has the background of an auditing firm. VB Consultants was an accounting consultant with Dutch roots specialised in governmental accounting but it has ceased its activities in this branch.

13.2 OVERVIEW ACCOUNTING OUTPUT 1995

A detailed overview is presented in Appendix VIII. Overview accounting output 1995.

13.2.1 General findings

In general, the output containing both the budgetary accounts and the annual accounts, is quite extensive (the median length is about **315 pages** and 25% exceeds about 385 pages)²³⁷.

Every Flemish municipality has made up the balance sheet and P/L account 1995, except for 5 municipalities which have not been able to finish the statements up to 30th April 1997.

The number of municipalities having disclosed a fixed assets movement schedule seems fair (i.e. 84.9%). However, 9 of them have merely disclosed a summary. Furthermore, the concept and the lay-out of all the schedules varies strongly across the municipalities, which disables cross-sectional comparisons.

The disclosure of the contingencies is very poor looking at the compliance of 37.2%. Focusing on the contents of the contingencies, the results are even worse since claims and litigations are never disclosed.

In order to clarify the difference between the capital as of 31st December 1995 and the initial calculated capital at the first drawing up 1st January 1995 the movements or adjustments had to be commented, even if there were no changes. Only 77.7% has done so.

²³⁷ In Volmer's study in The Netherlands (1992, p. 11, 32) the municipal annual accounts showed an average of **330 pages** up to a maximum of 820 pages. Volmer's remark wondering whether there is no "information-overload" which reduces the readability and hence the accountability, can be approved. Jones & Pendlebury (ABR 1982 p. 133) found for the UK local governments that 50% scored between 20 and 50 pages, 12% over 100 pages with a maximum of 225 pages, but they were considering only so-called "abstracts".

The comments in the Notes on accruals/deferrals are very weak (i.e. 26.1%). Of course, the many municipalities which have limited their comments to just the balances of the accrual/deferral accounts are not included in the compliance percentage. The 12 cases "Data N/A" consist of 6 municipalities not having recorded accruals/deferrals at all.

The series 15 are nothing more than formalistic documents showing in the broad sense the individual details of cash at bank and in hand accounts together with copies of bank statements as a kind of justification.

Although not obligatory, a number of NARGC regulations and guidelines imply further details and clarifications in the light of the aimed transparency and usefulness of the annual accounts. In the first series the frequencies of detailed balance sheet items are more or less reasonable (i.e. approximately 2/3). Comments on the P/L items are given far less attention (i.e. about 46%).

13.2.2 Trial balance

A rather important document is the trial balance although it is frequently missing (the compliance is only 72.6%). There are two opposite gradations not recognised in the percentage:

- On the one hand a number of municipalities often being related to the accounting consultant Moores & Rowland leave out the trial balance. Nevertheless, their annual accounts are detailed on the level of the individual account.
- On the other hand, 4 of the 69 are just showing the balance sheet accounts²³⁸ or only the P/L accounts. Among the other 65 there are even examples of municipalities

²³⁸ The enclosing of just the balance sheet accounts in the trial balance might be due to the perception of the term "trial balance" as if only balance sheet accounts have to be considered.

showing a trial balance with balanced P/L accounts, which disables their use.

In general the concept and function of the trial balance is not always well understood.

- Some of the trial balances are difficult to consult due to the hole puncher which has made the left side containing the codes of the accounts unreadable.
- Also remarkable is that some separate the part of the balance sheet accounts and put the other part with the P/L accounts some place else in the report.
- At least 1 municipality has disclosed a detailed trial balance not for the year end but 4 times (i.e. quarterly).
- Some municipalities print all the accounts even the ones not used; others only print out the accounts having a balance.
- Many times there happens to be a lot of redundancy in that details of annual account items are commented on the account level whereas they have already been shown in the trial balance. Even literally a copy of parts of the trial balance is used as a detailed comment.
- Another example of redundant and unnecessary trial balance information is a municipality showing two sets of trial balances: one containing the situation after 12 months and another after the so-called 14th month. This last one is sufficient and the other made before the year end journal entries is redundant.

13.2.3 Readability, presentation

Many municipalities include comments on how to read and interpret the annual accounts (i.e. 78.7%) but the comments are very stereotypically gathered from some business handbooks and courses. 18 municipalities disclose at most 2 pages, 10 disclose at least 20 pages with a maximum of 41.75 pages.

In 76.6% of the municipalities the Notes contain a financial analysis, ratios and graphs almost completely in the style of business finance and sometimes they are grossly exaggerated. One might argue that the ratios and graphs are an attempt to justify the new accounting system and to serve user needs. Analyses of the budgetary accounts focusing more on the flow of expenditures and revenues are unfortunately less put forward (i.e. 38.9%).

Except for 1, the 17 municipalities using different colours (1 to 5 other than white) of pages to improve the readability are all located in the provinces West- and East Flanders.

Regarding the table of contents preceding the annual reports, the municipalities can improve the readability. 9 municipalities are not showing anything; 54 municipalities just partly.

13.2.4 Final remarks

Finally, some general remarks can be formulated. It is noteworthy to mention that the sequence of the different parts in the annual reports varies a lot between municipalities. Some of them start with the budgetary account and the balance sheet at the end; others start with an interpretation and ratios, etc.

Apparently, there is no standard on the sequence and one does not know which information should prevail and be put forward. Moreover, the different functions of the provided information are not clearly treated. Information for statistics is confused with managerial information; information intended as giving a financial overview is mixed up with information disclosed for justification. This mixing up leads to difficulties in using the annual accounts: whatever one is looking for is either not included or it is not in the right context, and vice versa.

It happens that municipalities do make up certain statements (e.g. RECEIV) since they are periodically obliged for higher governments, but that they forget to incorporate those statements in the public report as it is supposed to be done according to the regulations. Perhaps this could explain the rather low rate of compliance regarding ST173X, CADINC, which are formalistic requirements.

Normally, obtaining a copy or an overview of the annual reports is rather difficult. *Firstly*, there is no system of publication as for enterprises where the annual accounts are collected by the National Bank and are distributed by means of CD-ROM, micro-film, copies. *Secondly*, the data carrier is not strictly respected: some use just 1 booklet, others divide the information across 2, 3 sometimes 4 booklets; still others use separate (unbound) papers. Some provide all the information; others limit their public information to the balance sheet and the P/L account without explicitly including other kinds of obligatory statements, etc. *Finally*, most of the municipalities have a very limited edition of the annual reports. In the empirical study there are examples of reports which had to be resent or which could be overlooked in the municipality itself because of a shortage of copies.

This insufficient transfer of communication in annual accounts should not be interpreted as if the municipal officials were not willing to provide information, quite on the contrary.

13.3 PROBLEM AREAS OF ADOPTION AND NON-COMPLIANCE

The reporting of empirical analysis hereafter is not organised per line of compliance as was the case in the section concepts and constructs²³⁹. The structure is organised per item and in as far as was possible, in order of the items of the annual accounts.

13.3.1 First drawing up

As mentioned above a considerable problem is the *first* drawing up of assets and liabilities. *First* means that municipalities (except somewhat for the experienced municipalities) had no experience in accrual accounting. The term *first* also means that municipalities have existed for years without keeping a record of assets and liabilities. They now have to set up a new system in an existing entity without having any prior accounting data at their disposal. This lack of adequate points of departure causes difficulties in making inventories and in the valuation of particularly non-monetary assets (Datoussaid 1992, Pauwels 1994).

Referring to the responses on the open-ended question in the section 13.4, there appear to be a number of adoption problems. A first series could be called occasional problems of the first time, such as software difficulties (6 times); shortcomings in training and education (5 times) and a lack of instruction and regulations (9 times). It can somehow be expected that these weak points are going to be improved or adapted as time passes by.

However, a number of responses reveal complaints about rather conceptual issues with possibly permanent consequences. The general concept of the new financial accounting system is

²³⁹ See Chapter 4, 4.1 EXTENT OF COMPLIANCE.

criticized 9 times, especially where the relationship between budgetary accounting and financial accounting is concerned. Most of the negative remarks with a conceptual character concern the usefulness questioned in several aspects with on top the perceived uninterest of mandated officials. In addition, there seems to be a **"one-way information"**: bookkeepers and accounting personnel have to "beg" for accounting information in order to draw up the first balance sheet and to obtain the necessary financial-economic information²⁴⁰. There is no information flow in the other direction. Accounting information does not seem to be made necessary for the use in other departments.

The remarks considering the new financial accounting being dispensable, the lack of audit and the perception about the usefulness for politicians imply a serious risk for the continuity of the reformed financial accounting system.

There are of course advantages and positive appraisals as well. Redant (1995, p. 13-14) provides a number of merits of the reform and of the first drawing up in particular, such as:

- detecting errors in cadastral data;
- safeguarding municipal property by detection of properties that were "taken" by other parties or individuals;
- insurance premiums paid for capital goods that were no longer property.

However, these merits should not exclusively be attributed to the new financial accounting system. They also could have been achieved by other less extensive means (e.g. legislation, auditing, sanctioning). Financial accounting is a lot more than just a means for restructuring the municipal administration.

²⁴⁰ The interviewee was a Municipal Treasurer.

13.3.2 Timeliness

13.3.2.1 Regulations

The timeliness of the annual accounts is regulated by NARGC and NGW. Referring to the definition of the construct the date of readiness is regarded as the date of enactment. The ultimate date of enactment is 31st March 1996.

13.3.2.2 Findings

Table 13.4: Frequencies timeliness

Month of enactment	Frequency totally	Frequency experienced municipalities
March 1996	4	1
April 1996	9	2
May 1996	14	1
June 1996	20	3
July 1996	8	3
August 1996	5	-
September 1996	14	1
October 1996	10	-
November 1996	3	-
December 1996	5	-
January 1997	-	-
February 1997	2	-
March 1997	1	-
April 1997	-	-
Not finished	5	-
Total	100	11

The findings reveal that only 4 municipalities, of which 1 experienced municipality, are in compliance with the legislation. Almost 50% was ready before July 1996. As could be guessed the 2 holiday-months show a low frequency and more than a quarter of the annual accounts were made ready before the end of 1996. Just 5 municipalities are still working on their annual accounts.

In the early years of the financial accounting reform in The Netherlands the deadline was at the latest on 31st October 19N1 contrary to 31st March 19N1 in Belgium. Looking at the empirical data of Faber & de Jong (1988, p. 19-20) and taking the same deadline as a point of departure (i.e. the provisional enactment) and the same lag of 6 months in the time-scale, a comparison can be shown in the following scheme.

Fig. 9: Comparison timeliness

The Netherlands 1985		Flanders 1995	
<hr/>			
<u>Before deadline:</u>			
< 1st Nov. 1986	4%	< 1st April 1996	4%
 <u>After deadline:</u>			
< 1st May 1987	18%	< 1st Oct. 1996	70%
< 1st Nov. 1987	36%	< 1st April 1997	21%
< 1st May 1988	22%	> 1st April 1997	5%
> 1st May 1988	20%		
Total	100%		100%

The average number of "days too late" was in The Netherlands **289 days**, whereas in Flanders it was **133 days**. In other words 42% of The Dutch municipalities were at least 1 year too late; this figure was just 5% in the Flemish municipalities.

These Dutch findings were confirmed by Volmer (1992, p. 24) who similarly noticed that the average number of "days too late" for the annual accounts of 1986 was 243 days²⁴¹ with a minimum of 1 month and a maximum of 15 months too late. This means that on average the publication date in The Netherlands

²⁴¹ According to Volmer the average months between balance date and publication was 18 months. In respect of the 10 months allowance, there remains 8 months too late or $8 * 365/12 = 243$ days.

took place 1.5 year after balance date. For the Flemish municipalities this figure is about 0.6 year²⁴² after balance date.

It is quite clear that the Dutch municipalities are less prompt in finishing their annual accounts and they have a deadline of 7 months further at that.

An empirical example in the opposite direction comes from Dwyer & Wilson (JAPP 1989, p. 41-42). Based on a sample of US municipalities over a population of 25,000, Dwyer & Wilson focused on the timeliness for the fiscal year 1982. Their date of being ready of the annual reports was defined as the date at which annual reports were mailed to users. They found that 10.6% of the municipalities reported in the first three months after balance date (in Flanders 4%) and 93% in the first 7 months (in Flanders only 55%). It is obvious that the American municipalities are quite a bit faster.

13.3.2.3 Testing

Although this study does not aim to examine the timeliness as such, it is nevertheless interesting to attempt testing a number of supposed plausible correlations.

Hereafter the factors experienced municipalities, business accounting experience, permanent accounting consultants, training, software systems and municipal size will be examined with regard to the timeliness. One should be cautious in interpreting the findings since the approach is univariate and interactions are not considered.

²⁴² An average of 133.0 days too late plus the 3 months (January, February and March 1996) of allowance results in 223 days or $223/365 = 0.6$ years between balance date and date of enactment.

1/ Experienced municipalities

At first sight the 11 experienced municipalities tend to be faster in preparing their annual accounts than the 89 others. The average time in "days too late"²⁴³ for the experienced is 73.5 days and for the non-experienced 140.4 days.

A Mann-Whitney U test reveals that the experienced municipalities are significantly ($\alpha = 5\%$) faster in preparing their accounting output.

2/ Business accounting experienced employees

One could assume that municipalities with bookkeepers with an accounting experience engaged from business undertakings are more promptly in finishing the annual accounts. However, the findings do not confirm this assumption, on the contrary.

The 28 municipalities having at least one experienced bookkeeper show an average of 151 "days too late", whereas the 70 municipalities²⁴⁴ without any experienced bookkeeper score an average of merely 119 "days too late".

Using a Mann-Whitney U test the null hypothesis of no significant difference could not be rejected at $\alpha = 5\%$, but at 10% it could (α is approximately 5.9%). In other words municipalities having experienced bookkeepers are even worse in timeliness.

²⁴³ "Days too late" means the days between the date of enactment and the legal deadline of 31st March 1996; the 4 municipalities which have finished their annual accounts a few days before 31st March 1996 are algebraically included in the calculations.

²⁴⁴ For the 2 remaining the data were not available.

3/ Permanent accounting consultants

Analogously as for the experienced bookkeepers one could assume that municipalities having called in an accounting consultant are better off in timeliness than other municipalities. Synthesizing the months into quarters following view results.

Table 13.5: Frequencies timeliness per consultant

Consul- tant	<= 31st March 96	<= 30th June 96	<= 30th Sept 96	<= 31st Dec 96	> 31st Dec 96
None	4 100%	24 56%	15 56%	10 56%	4 57%
M&R	-	6 14%	3 11%	5 28%	2 29%
EUR	-	11 26%	7 26%	2 11%	1 14%
BDO, VB	-	2 4%	2 7%	1 5%	-
Total ^a	4 100%	43 100%	27 100%	18 100%	7 100%

^a For just 1 municipality the data are not available.

It is remarkable that the municipalities without accounting consultant show quite constant figures, except for the first category.

The averages of "days too late" are as follows:

Table 13.6: Average timeliness per consultant

Consultant	Number	"Days too late"
None	57	122.1
M&R	16	168.7
EUR	21	120.7
BDO, VB	5	143.2

	42	141.7
Data N/A ^a	1	395.0
Total	100	133.0

^a The municipality for which these data were not available had not finished its annual accounts 1995 up to 30th April 1997, which makes the number of "days too late" $365+30 = 395$.

Except slightly for Euraccounts the municipalities having called in consultants seem to be slower. This hypothesis cannot be proven since in the Mann-Whitney U test the null hypothesis could not be rejected (alfa approximates 12.5%). Thus, the municipalities having called in accounting consultants still have the benefit of the doubt of being as fast as the others and vice versa.

Even comparing M&R and EUR does not result in a significant difference (alfa 13.14%, the null hypothesis could not be rejected).

4/ Training

One could assume that municipalities with an accounting staff trained in the new municipal accounting techniques are more prompt in reporting than municipalities whose accounting staff was not trained. The average number of "days too late" for the former group consisting of 85 municipalities was 122.4 days, while the average number was for the latter consisting of 13 municipalities²⁴⁵ 162.1 days. The Mann-Whitney U test revealed no significance at alfa = 5% but it did at alfa = 10%.

5/ Software

The municipalities sorted by their kind of software is shown in the next table. Apparently, there is a lot of variety in "days too late". The figures below are just included by way of illustration. No further testing was done.

²⁴⁵ For the 2 remaining the data were not available.

Table 13.7: Timeliness per software system

Software	Number	"Days too late" Average	"Days too late" Stand. dev.
CEVI	26	132.7	114.4
Schaubroeck	25	73.8	65.6
CIPAL	24	133.1	72.8
GEMIC	8	257.9	80.4
VLABRIC	5	160.8	39.6
IN2	5	190.0	99.3
REMMICOM	4	86.3	18.0
Ceccoware	1	81.0	-
ICL	1	177.0	-
Data N/A	1	395.0	-
Total	100	133.0	100.0

6/ Size of the municipality

Although suggested by some authors (Faber & de Jong 1988, Volmer 1992), the relationship time-size does not appear to be relevant as can be seen in the next table. An attempt to regress²⁴⁶ the size measured by the population and "days too late" reveals that there is no relationship (calculated t-test on Pearson's correlation coefficient is 0.058 whereas the critical one-tailed value is 1.3 at $\alpha = 5\%$ and 1.6 at 10%).

Table 13.8: Timeliness per size category

Size categories	Number	"Days too late" Average	"Days too late" Stand. dev.
1	1	218.0	-
2	3	143.3	64.9
3	8	81.9	71.1
4	10	191.1	126.7
5	24	105.3	62.8
6	23	135.3	97.2
7	25	145.6	116.0
8	6	135.0	93.5
Total	100	133.0	100.0

²⁴⁶ This approach remains very rough since goodness-of-fit checks are not paid attention to. The results should be interpreted not too strictly.

7/ Impact of "good news" on timeliness

According to Dwyer & Wilson's findings (JAPP 1989, p. 53) there exists an impact of the contents of the municipal annual reports: "... cities with good news to report will do so more promptly than cities with bad news." This finding is not confirmed nor questioned by Volmer (1992, p. 56), who was looking at the capital and reserves per capita.

For the Flemish municipalities the concept capital and reserves is heavily threatened by the undefinable value of a number of fixed assets acquired before the reform has taken place. Therefore it is not advisable to measure capital and reserves per capita as a proxy for "good news". It is more reliable if the focus is on monetarily measurable items.

A first surrogate is to look at the municipal debt per capita and the own revenue per capita. One could hypothesize that the higher the first and the lower the second, the worse is the accounting news and thus the slower the reporting.

Looking at the municipal debt per capita there is a significant²⁴⁷ ($\alpha < 5\%$) negative relationship with the timeliness; the own revenue per capita shows a positive relationship ($\alpha 6.9\%$) with the timeliness.

Based on these findings one could conclude that indeed municipalities with "bad news" are significantly less prompt to report.

However, applying another surrogate and looking at the financial revenues per capita together with the revaluation revenues per capita, which indicates the earning power as well as the absolute importance of fixed assets and financial assets, the findings are very poor in supporting the aforementioned hypothesis.

²⁴⁷ Using a bivariate correlation analysis on 94 municipalities which data were available. It should be noticed that 5 of the 6 unavailable are municipalities that have not finished their annual accounts up to 30th April 1996. The non-inclusion of their data could somehow be a noising factor in interpreting the findings.

13.3.2.4 Concluding remarks

In general the timeliness appears to be acceptable although the legal deadline is not reached for most municipalities. The experienced municipalities are significantly more prompt, which could be expected. The same is the case for municipalities with trained accounting personnel. On the other hand municipalities having engaged employees with a business accounting experience are significantly slower in preparing the annual accounts. A possible explanation could be that bookkeepers with business experience are less nervous, less full of expectation and less hasty to accomplish the accounting duties, whereas the traditional municipal bookkeepers are more challenged to give their best side, with a courageous engagement and looking up to the merits of the new system. However, an opposite reasoning is also possible: bookkeepers with business experience might be challenged to transfer their business accounting know-how.

Regarding the accounting consultants and the size there is no significance. Finally, there are contradictory findings as to the impact of "goods news".

13.3.3 Starting value

Among the examined municipalities there are only 4 having recorded one of the *natures* of assets which should not have been inventoried 1st Jan. 1995. In all respect these disparities among the municipalities are neglectable.

Also some of the experienced municipalities have recorded some of those items. These last municipalities should not be sanctioned since the legislation forbidding the recording was not yet completely worked out at that time. The effects of disharmony are in the range of a couple of millions BEF for 7 of the 11 experienced, which is also neglectable in terms of comparability.

13.3.4 Fixed assets

Even though this study cannot guarantee exhaustiveness, it does reveal a number of missing items, inconsistencies, remarks on valuation and unusual disclosures.

13.3.4.1 Ownership

13.3.4.1.1 Omissions

The empirical information derived from Question II-3 of the questionnaire indicates that some balance sheet items are not recorded despite the municipal ownership.

The 98 usable answers reveal that 16 municipalities have admitted the omission of certain existing *natures*²⁴⁸ or parts of *natures* in their first balance sheet.

For 11 of them the reason was the impossibility to inventory and value the item; for the other 5 there were different not always clear reasons (e.g. "forgotten").

One should be very careful in extrapolating the empirical results. There is the risk that the responses to this question are biased. *Firstly*, one does not like to highlight features which are not in compliance with NARGC and which are not nice to mention. *Secondly*, looking up all the omissions and items which have been left out makes the filling in of the questionnaire more time consuming. This idea is also confirmed by interviewing some Municipal Treasurers.

Nevertheless, the 16 responses to a partly open question delivered interesting information about non-disclosed items.

²⁴⁸ Obviously, the *natures* being the property of the municipality but "economically" belonging to the ordinary municipal enterprises ("regieën") are not considered here. Such items have to be recorded in the balance sheet of the ordinary municipal enterprise.

The not inventoried items are mostly:

Natures

208 Plantings on land	5 times
241 Land of constructions	3 times
242 Constructions	3 times
207 Timber plantation	2 " "
340 Art patrimony	2 " "

Parts of natures

Shares and loans PIDPA ²⁴⁹	2 " "
---------------------------------------	-------

Just a few respondents mentioned the importance of the item in terms of the approximate value. The responded value aspect is not that important. In a few cases the mentioned explanation was a lack of collaboration from technical departments.

This kind of information coming from the questionnaire is not systematically and clearly reported in the annual accounts. Therefore, the annual accounts are not made easy to interpret and to compare.

13.3.4.1.2 Boundary problems

There appears to be a lack of clear and unambiguous distinction of municipal property vs. property of related parties. For example, *Natures* 236 *Waterpipes*, 237 *Other networks* and 238 *Public lighting*: these items are not systematically disclosed in the annual accounts. The reason should be that these facilities are the property of separate organisations²⁵⁰. However, in the annual accounts and in the Notes in particular, information about the property definition, relationship and collaboration with similar

²⁴⁹ PIDPA is an intermunicipal organisation.

²⁵⁰ Examples of such related parties are intermunicipal organisations, private organisations, etc.

organisations is very scarce. Consequently it is rather difficult to interpret the annual accounts and to assess the level of compliance with NARGC.

By means of Question II-3 the questionnaire attempted to focus on the question of the ownership and consequently on the fact that certain municipal natures were not inventoried in the first balance sheet.

1. Natures juridically property of another organisation

Only 4 of the 98 usable answers responded alike that the natures 236 Waterpipes and 237 Other networks were not recorded because another organisation is the owner. This result should be interpreted with caution: as a matter of fact, there are roughly 60 municipalities which have left blank these 2 natures in their first balance sheet. Probably, a lot of respondents must have thought that they did not need to answer the question since one could argue about the definition of "municipal natures".

2. Nature is juridically municipal property but belongs economically to an "ordinary" municipal enterprise.

Only 3 municipalities covering totally 9 different "ordinary" municipal enterprises have responded their non-disclosure of some natures because of the involvement of an "ordinary" municipal enterprise. However, one could assume that these findings are not complete compared with the answers on question I-2 in the first part of the questionnaire: 14 respondents out of 98 have filled in the existence of totally 20 "ordinary" municipal enterprises which are in the domain of:

- real estate and construction	7
- water distribution	4
- electricity distribution	3
- slaughterhouses	2
- others	4

Based on the financial information by some respondents attached²⁵¹ to the returned questionnaire, the "ordinary" municipal enterprises cover a material part of the municipal properties.

13.3.4.2 Completeness - Existence

As the term indicates the *Nature 241 Land of constructions* represents the land on which constructions were built whereas the constructions themselves are registered in the *Nature 242 Constructions*. The *natures 261* and *262* are similarly distinguished for watercourses.

It seems obvious that the *natures 241* and *242* as well as the *natures 261* and *262* either occur together or not at all.

These assumptions cannot be empirically confirmed, on the contrary, which points at a number of inconsistencies.

Looking at the figures as of 31st Dec. 1995 the empirical findings reveal that 5 municipalities registered both *natures 241* and *242* and 67 municipalities neither any one.

However, 1 municipality recorded just the land without showing the constructions and 29 disclosed constructions without the land. It is surprising that these 29 municipalities would be proprietor of immovable constructions without owning the land on which they were built. It would be understandable if these last *natures* were classified elsewhere in the accounts. However, just a limited number of municipalities have clarified this practice in the Notes.

Analogous peculiarities occur comparing *Nature 261 Land of watercourses and reservoirs* and *262 Watercourses and reservoirs*. 23 municipalities are consistent in recording them both and 17 neither. But, 54 municipalities are showing land of watercourses without having recorded the watercourses

²⁵¹ One municipality additionally returned the annual accounts of their two "ordinary" municipal enterprises.

themselves and vice versa 2 municipalities showed the watercourses without the land beneath.

Concerning the validity of these strict conclusions one could argue that the observation is done dichotomously instead of considering the actual amounts of the accounts 241, 242, 261, 262. This is true and there are a few municipalities recognised as having filled in both accounts albeit with very small amounts. Nevertheless, the accounting regulation is adopted at least procedural and this is a step in the direction of compliance instead of no compliance at all.

13.3.4.3 Classification

Classification problems appear: the absence of some items might be explained by their inclusion and disclosure in another type of nature. Some cases seem to point out that these practices occur: in some municipalities the transfer to another nature is literally mentioned. In other cases the very low amount of one nature combined with the rather big amount in another nature could indicate classification transfers. These classification problems can be explained amongst other reasons by the fact that some estimations were made without being detailed enough over the concerning natures. However, such classification adaptations are not systematically clarified in the Notes. Furthermore, such sometimes arbitrary adaptations are principally incorrect and they can result in distorted annual accounts.

13.3.4.4 Valuation

13.3.4.4.1 Natures of land generally

By virtue of art. 1 MD 30th Oct. 1990, modified by MD 1st Feb. 1994 the land belonging to the following natures shall initially be valued at the municipal real estate tax rate ($100\text{m}^2 = 1 \text{ opc}^{252}$):

- 205 Land of parks, gardens, cimetaryies, sport parks and recreation areas,
- 231 Land of the roads,
- 241 Land of constructions,
- 261 Land of watercourses.

If the application of this legal valuation rule does not result in a realistic view of the current value, the value may be estimated (art. 2 MD 30th Oct. 1990, modified by MD 1st Feb. 1994).

It can be noted that NARGC imposes different valuation and depreciation rules, in spite of the general possibility to withdraw certain obligatory rules and to replace them by an occasional more realistic estimation.

13.3.4.4.2 Land of parks, ... and land of roads

Looking at the balance sheets as of 1st Jan. 1995 of 95²⁵³ of the sampled municipalities, the nature 205 Land of parks, gardens, cimetaryies, sport parks and recreation areas counts for around 5.5 bio BEF. The total of the 96 known balance sheet totals was circa 253.1 bio BEF, which results in an approximate importance quote of 2.2%. For the nature 231 Land

²⁵² The valuation of land using this rule implies a valuation according to the "fiscal earning power" of the municipal land. Thus the worth of the land is legally presumed to be the level of tax it can gain.

²⁵³ The data for 3 municipalities were not available and for 18 municipalities the 1st Jan. 1995 figures are replaced by their 31st Dec. 1995 amounts for the same reason of non-availability. The distortion of switching in some cases 1st Jan. 1995 and 31st Dec. is neglectable.

of the roads the total was 23.2 bio BEF or a percentage of 9.2%. Table 13.9 shows which municipalities applied the strict legal valuation rule and which chose for an alternative rule.

Table 13.9: Frequencies valuation practices land of parks, ... and land of roads

Valuation Practices	Land of parks,.. 205	%	Land of roads 231	%
Legal rule: 100m ² = 1 Opc	6	8.3	14	19.2
Alternative rule:	66	91.7	59	80.8
* commented rule and price per m ²	57		56	
* without comment on the rule	-		2	
* ambiguous rule	2		-	
* no further information in study ^a	7		1	
	----	----	----	----
	72	100%	73	100%
Data N/A	28		27	
Total	100		100	

^a These municipalities have certainly applied an alternative rule which might well have been described and published, but that information was not available for this study.

Apparently, most of the municipalities have chosen for the optional alternative valuation rule for both of the natures using a fixed amount BEF/m².

Applying such an alternative valuation should have depended on the legally required condition of improving the realistic view of the current value. However, meeting this condition by means of a proof or motivation of the more realistic view is merely reported in the different annual accounts. Apparently, the Municipal Executives have not felt strongly about this conditional aspect.

Probably, they preferred an easier, more manageable valuation method. The "fixed rate rule" indeed creates a better view, but it also facilitates a "valuation-disclosure management" whereas the legal rule leads to a fixed and uncontrollable valuation.

It is not uncommon to think that municipalities have discussed and have weighted up the pros and the cons of the decision to chose for either the legal or the alternative rule and at

which price level. In a number of cases the legal rule was literally suppressed to avoid a too heavy valuation.

On the other hand, one cannot deny that the legally prescribed rule of realistic view of the current value is **unclear** and very difficult to implement correctly, which could explain the more individualistic and subjective estimation this study encountered.

Valuation practice 205 Land of parks, ...

The 6 municipalities which applied the legal rule are characterised by a rather high unit value/m² as compared to the ones which have chosen for an alternative rule. For the "legals" the average level is 365.4 BEF/m² with a min. of 236 BEF/m² and a max. of 756 BEF/m².

Among the "alternatives" 2 municipalities have kept their valuation rule **ambiguous**²⁵⁴ in that their rules present controversial valuation methods without concluding which one is actually applied. This approach is not at all an improvement of the transparency, on the contrary.

The other "alternatives" all express the rule in terms of a unit price per m². Of these 57 municipalities 9 have disclosed a valuation range in different prices (e.g. 30 - 150 BEF/m²) without mentioning the resulting unit²⁵⁵ price/m²; the other 48 have set forward one price level which can be one sole price or which might result from an average. This last group can be approached statistically and their key-items are as follows:

²⁵⁴ The term ambiguous rule signifies that firstly one rule is set and a number of pages later in the same report another rule is pretended.

²⁵⁵ According to Circular Letter BA 95/2, item 3.5.2. regarding the first balance sheet 1st January 1995, every municipality should have disclosed for each nature the total surface in m² as well as the average unit value per m².

Average 224 BEF/m²; standard deviation 340.0 BEF/m²
 Median 150 BEF/m²
 Min. 30 BEF/m²
 Max. 2,312 BEF/m² (outlier)

A frequency overview for the 48 "alternatives" is as follows:

BEF/m ²	
<= 50	6
<= 100	16
<= 150	3
<= 200	13
<= 300	0
<= 350	0
<= 400	2
> 400	5

	48

Apparently, the rates vary a lot. A possible explanation might be the different kinds of areas included in this *nature*: parks can differ a lot; gardens are no cimetaries; recreation areas can be differing, etc.

Another reason could be the classification of which acres exactly belong to this *nature*, which can influence the number of square meters and thus the implicit value in BEF/m².

Looking at the first balance sheet it is not always clear which parts of the municipal area are considered in this *nature*. An important number of municipalities identify and highlight streets, areas, acres in the report attached to their first balance sheet, but others have the reader guessing about the identification of the parts drawn up. No municipality used photographs, maps or any other kind of communication tool in order to illustrate their definitions. The occurrence of such a huge range of varying unit prices disables the comparing of first balance sheets and annual accounts 1995 as well.

Valuation practice 231 Land of the roads: unit prices

About 20% of the examined municipalities has applied the strict legal rule resulting in an average price of 323.9 BEF/m², with a min. of 105.6 BEF/m² and a max. of 446 BEF/m². These figures are based on the known price information of 9 of the 14 municipalities. For the other 5 concrete price information was not traceable.

These 9 "legals" are not concentrated in the same region; they are located in 4 of the 5 Flemish Provinces. A geographical link should not be assumed.

Again the "legals" are in general showing higher unit values than the "alternatives" having an average of 102 BEF/m².

56 of the "alternatives" all express the rule in terms of a unit price per m², 2 of which have disclosed a valuation range in different prices (e.g. 30 - 500 BEF/m²); the other 54 have set forward one price level, mostly one fixed price for the whole municipality. Their key-items are as follows:

Average 102 BEF/m²; standard deviation 72.0 BEF/m²

Median 100 BEF/m²

Min. 10 BEF/m²

Max. 338 BEF/m²

A frequency overview for the 54 "alternatives" is as follows:

BEF/m²

<= 10	2
<= 25	4
<= 50	15
<= 100	17
<= 150	2
<= 200	12
<= 300	1
> 300	1

	54

Among the "alternatives" a minority of 2 municipalities do not disclose any comment on their alternative valuation rule,

which is not in conformity with the aim of the regulations.

The actual rates vary incredibly although one could expect more or less similar price levels. The highest rate appears to be 446 BEF/m² ("legals"), the lowest 10 BEF/m² ("alternatives") and these are not really outliers. The resulting divergence ratio of about 45 times can hardly be called realistic.

These valuations are hard to believe and have an important impact on the interpretation of the balance sheet. The value of the roads, of which the land is a part, is in general approximately 33.5% of total assets.

Contrary to other kinds of land the differences can hardly be explained by the different kinds of areas included in this nature: the kind of land for roads is almost everywhere the same in Flanders. Moreover, roads are well defined, planned, measured, developed, maintained, which guarantees more or less an equal quality level.

Regarding the experienced municipalities an almost similar varying price pattern appears. Of the 9 experienced which could be studied there were 3 "legals", 1 of which with a price of 356 BEF/m²; the other 6 "alternatives" vary from 40 to 210 BEF/m². Adaptations among the experienced towards each other could not be noticed in the annual reports 1995.

Because the experienced municipalities, which have existed for over more than 2 years, are as divergent as the non-experienced, one can assume that the existing price levels of the non-experienced are not going to be adjusted either in the forthcoming years.

This fixed tendency renders an adequate comparison of municipalities very difficult and is actually contrary to the aimed transparency.

Valuation practice 231 Land of the roads: book values

The land of roads and roads in general are an advantageous study object in that all municipalities can be compared: every municipality has roads for the same or similar purposes; these roads connect neighbouring municipalities implying similar functions and outlooks; the accessories and signs of the roads depend on safety regulations which are the same for all municipalities.

Taking the value of *nature 231* into consideration results in interesting findings particularly in respect of the **comparability of fixed assets** among municipalities. To give an impression the following approach concentrates on the 5 highest / lowest book values. The size of the population and the surface measured in hectares are used as a proxy for evaluating the reasonableness of the total value. This approach is of course very rough since it does not take into account the kind of municipality, the volume of roads, etc.

The 5 highest reveal following picture:

	Municipalities				
	A	B	C	D	E
<hr/>					
231 Land of the roads (mio BEF)					
	2,183	1,327	1,325	1,192	1,072
Population (in '000) ²⁵⁶					
	67	31	20	19	228
Surface (in hectare) ²⁵⁷					
	10,234	11,422	3,299	2,366	15,632
<hr/>					

²⁵⁶ Source: Gemeentelijk Zakboekje '95-'96.

²⁵⁷ Source: Gemeentelijk Zakboekje '94-'95.

The 5 lowest reveal following picture:

Municipalities				
A'	B'	C'	D'	E'
<hr/>				
231 Land of the roads (mio BEF)				
0.9	1.9	12.6	15.8	17.0
Population (in '000)				
1	2	8	14	2
Surface (in hectare)				
358	1,078	527	4,250	748
<hr/>				

Comparing the 5 lowest with the 5 highest results in an incredible situation, for example:

D' has a population of more than 14 thousand citizens and a surface of 4,250 ha. The population of B, C, D is somewhat higher, but the surfaces of C and D are quite a lot smaller. Nevertheless, B, C, and D have disclosed a total value for the nature 231 which is **75 to 84 times higher** than the value of D'. D' is not an outlier; there are several others with similar characteristics in population and surface for which the ratio is less spectacular but remains amazing.

Within the two groups of highest and lowest a number of inconsistencies also appear. For example, how can it be explained that municipality A being in all respects seriously smaller than E which is the largest in the sample, has lands of the roads for more than the **double** of the largest one?

Experienced municipalities

One could argue that all these differences and heterogeneity are due to the drawing up of the first balance sheet and that the differences will be adjusted in the next years. However, focusing on the experienced municipalities, there also appears

to be an undeniable heterogeneity. To illustrate: a certain experienced municipality shows the nature 231 for a value of 65 mio BEF, two others have less citizens and surface, but show amounts of 103 mio and 193 mio BEF. Still two others have a smaller population, a surface of roughly 50% more, but show amounts of 433 and 494 mio BEF.

Another illustration: an experienced municipality shows 253 mio BEF for nature 231 having 21 thousand citizens and a surface of about 8,000 ha. Four others have less citizens and less surface, but are showing amounts from 413 to 572 mio BEF. These findings would imply a serious unit price difference. First of all these municipalities are of comparable kinds. Secondly, one can question conceptually the valuation rule of taking current values per m² for land which has been occupied for centuries by municipal roads. Moreover, principally municipal roads cannot be alienated. If one would focus on recently compulsorily expropriated land for building new roads, then recognising the current value per m² to achieve the land might be considered. However, for the most of the existing municipal roads as of 1st Jan. 1995 this is not the case.

Considering the book values of the land of roads per citizen, the results are as follows:

	<u>Unexperienced</u>	<u>Experienced</u>
Average	13,390 BEF/cit.	18,842 BEF/cit.
Standard deviation	13,870 BEF/cit.	11,723 BEF/cit.
Variation coefficient	1.036	0.622

A two-tailed t-test provides a calculated value of 1.364, but the null hypothesis stating that there is no difference in average valuation between experienced and unexperienced municipalities cannot be rejected since the critical test

value exceeds 1.980 (Emory 1980, p. 509) at an alfa-level of 5% and 1.658 at 10%.

This conclusion only proves that the averages do not differ significantly; the spread of valuation per citizen within the experienced is not dealt with. The variation coefficient is smaller for the experienced, but it is not neglectible.

If normal business enterprises are considered in a similar going-concern context, it is fair to say that mostly the values of acquiring fixed assets are similar or are at least comparable due to market mechanisms. Apparently, at least partly caused by a lack of market and other economic mechanisms, the public sector reveals an enormous **divergence** thus preventing and disabling an adequate comparison.

Another important interpretation is that the huge heterogeneity is caused by the arbitrary, uncontrolled estimation practices of an enormous heritage of existent municipal fixed assets.

Perhaps it could have been more convenient to control and follow-up the estimation practices in the beginning or to assess fixed nominal values as a reminder or to apply a more qualitative approach without valuing in order to prevent these lasting valuation problems.

13.3.4.4.3 Metalling and accessories of the roads

As an extension of the nature 231 Land of the roads, two other linked natures can be put forward, viz. 232 Metalling of the roads and 234 Accessories of the roads.

The nature 232 Metalling of roads contains the foundations, concrete, cobblestones, paving stones, clinkers, ... of roads. This nature had to be valued at its construction value in the first balance sheet. The nature represents a total value as of 1st Jan. 1995 of about 22.4 bio BEF. Apart from the price levels of land of the roads, one could somehow expect a certain relationship between the value of the land of the roads and the metalling of the roads. Apparently, this is not the case looking at the empirical findings:

the metalling of the roads in respect of the land of the roads ranges from factor 0.1 min. to 11.7 max. with $Q1 = 0.7$; $Me = 1.2$ and $Q3 = 2.8$

The reasons for these differences are not obvious: misclassification could be a possible reason, price differences in metalling, etc. Anyway, these findings seem to indicate a poor consistency and a weak comparability across municipalities.

The nature 234 Accessories of the roads includes the drives, cycle-tracks, footpaths, shelters, gutters, etc. of the roads. This nature had to be valued at its acquisition or construction value and represents about 7.6 mio BEF, which is not neglectable.

Of the 95 examined municipalities 11 did not disclose this asset, which seems strange: municipalities without footpaths or with footpaths not belonging to the municipality are difficult to imagine. Only 1 municipality has motivated the non-disclosure partly by transferring the contents to another nature and partly by leaving out some elements which were difficult to inventory. Two municipalities have not disclosed

any clarification about the non-disclosure in the first balance sheet and in the annual reports 1995 neither. Regarding the remaining 8 the first balance sheet reports were not available to elaborate an appraisal.

The municipalities not disclosing this asset are certainly not the smaller ones, on the contrary. Therefore the non-disclosure cannot be justified by the irrelevant importance of the item.

Although rather rough the disclosure pattern of this nature could be approached by the ratio 234/231 as a kind of an analytical review procedure. The characteristics of this relationship are as follows:

Min = 0; Max = 6.5

Q1 = 0.1

Q3 = 1.1

An interpretation of the figures by means of this analytical review procedure results in a number of doubtful disclosures even though the figures are not audited individually, which was not possible in the scope of this study. It remains hard to believe that the value of the accessories of the roads exceeds the value of the land of the roads by a number of times, unless the land of the roads is underestimated itself or misclassification has taken place.

The figures clearly reveal strange results: the topper is a municipality of 16 thousand citizens and a surface of 6,000 ha showing accessories of the roads for an amount of 920 mio BEF whereas the average for the 95 municipalities is about 79.4 mio BEF. The second largest shows an amount of 553 mio BEF in a municipality of 31,000 citizens and so on.

Misclassification or reclassification would not be that bad insofar that the completeness is safeguarded, but:

- the aimed transparency and consistency is not

guaranteed, on the contrary,

- classifying property under the category of 231 instead of 232 or 234 implies another valuation rule,

- classifying property under the category of 231 instead of 232 or 234 implies another depreciation rules: 231 is not depreciated, 232 and 234 shall be depreciated over a period over 30 years,

- there is the opportunity to influence figures and comparability.

13.3.4.4.4 Land of constructions and land of watercourses

Valuation practice 241 Land of constructions

Constructions can be defined as bridges, tunnels, subways and other municipal public works. It seems likely that not every municipality is proprietor of such assets. The findings are similar. The majority is not disclosing this item (i.e. 89.2%). However, 53 of them have not at all motivated or clarified the absence of this item, which is not in compliance with the intentions of the accounting regulations. This statement is proven by the fact that 12 municipalities did mention the reason behind it. The following acceptable reasons were cited in the first balance sheet 1st Jan. 1995 or in the annual reports 31st Dec. 1995:

- item classified in the nature roads	8 municipalities
- municipality is not the owner	2 " "
- item classified in assets in progres	1 municipality
- item is not existent	1 " "

Table 13.10: Frequencies valuation practices land of constructions and watercourses

Valuation Practices	Land of constructions 241	%	Land of water-courses 261	%
Legal rule: $100\text{m}^2 = 1 \text{ Opc}$	4	4.3	11	14.7
Alternative rule;	6	6.5	49	65.3
* commented rule and price per m^2	5		44	
* without comment on rule	-		2	
* ambiguous rule	1		-	
* "as a reminder"	-		1	
* no further information in study	-		2	
No disclosure	83	89.2	15	20.0
* without motivation	53		8	
* with motivation	12		1	
* no further information in study	18		6	
	-----	-----	-----	-----
	93	100%	75	100%
Disclosed but no rule	-		4	
Data N/A	7		21	
Total	100		100	

Again the price levels of the "legals" are with an average of about 302 BEF/ m^2 seriously higher than the "alternatives" which range from 25 to 200 BEF/ m^2 .

Valuation practice 261 Land of watercourses

In order to value the land of rivers (i.e. the bed of the river) and watercourses the majority has chosen for the alternative rule of estimation with a price level range of 10 up to 200 BEF/ m^2 and an average of 89 BEF/ m^2 . One of the "alternatives" has valued the land of the watercourses just as a reminder at the price of 18 watercourses multiplied by 1 BEF.

The "legals" are in number as well as in price level almost all the same where the land of the roads is concerned.

Again one can criticise and question the reality and acceptability of that **wide diverging range of 10 to 425.4 BEF/m²** for public goods which have a limited function. It is even theoretically hard to get an idea of the concept of value of such capital items. One might argue to draw up the value of similar properties in coastal municipalities reaching out up to the territorial waters. This highly imaginative suggestion would be unacceptable, but the premises are actually the same.

13.3.4.4.5 Land of buildings

The legal valuation rule in respect of the first balance sheet 1st Jan. 1995 for this item applies the following formula:

Value = 15% * Cadastral Revenues * 30 (art. 1 MD 30th Oct. 1990, modified by MD 1st Feb. 1994).

Similarly as for other kinds of fixed assets the value may be **estimated** if the application of this legal valuation rule does not result in a **realistic view of the current value**, (art. 2 MD 30th Oct. 1990, modified by MD 1st Feb. 1994).

Except for 3 missing data and for some municipalities for which the figures of 31st Dec. 1995 were taken, the sum of the item nature 211 Land of buildings is around 11.7 bio BEF or comparing with the additioned balance sheet totals 1st Jan. 1995 results in about 4.6%.

Based on the first balance sheet 1st Jan. 1995 and on information coming from the annual reports 31st Dec. 1995, the valuation practices give the picture as shown in table 13.11.

Apparently, most of the municipalities have chosen to adopt the optional alternative valuation rule using a fixed amount BEF/m². Analogous remarks can be set forward as regarding the other kinds of land above.

Contrary to the other kinds of land the 8 municipalities which applied the legal rule seem to have applied a lower unit value/m² compared to the ones which have chosen for an alternative rule. The price data were available for just 4 of the 8 showing an average of 245.9 BEF/m².

Table 13.11: Frequencies valuation practices land of buildings

Valuation Practices	Land of buildings 211	%
Legal rule: 15% * Cadastral revenues * 30	8	11.1
Alternative rule:	64	88.9
* commented rule and price per m ²	44	
* without comment on the rule	14	
* double-sided rule	4	
* no further information in study ^a	2	
	----	----
	72	100%
Data N/A	28	
Total	100	

^a These municipalities have certainly applied an alternative rule which might well have been described and published, but that information was not available for this study.

The figures for the "alternatives" are quite surprising: 44 municipalities have disclosed quantitative information concerning their estimation, 9 of which have disclosed a range of different unit prices considering the different qualities of land; the min. across the ranges was 15 BEF/m² and the max. 4,500 BEF/m². The other 35 have presented one mostly average price level: with a min of 42 BEF/m² and a max. of 5,000 BEF/m².

The frequency overview of these 35 "alternatives" is as follows:

BEF/m ²	
<= 500	6
<= 1,000	14
<= 1,500	9
<= 2,000	3
<= 2,500	0
> 2,500	3

	35

This very wide spread of unit prices is astonishing and is hard to accept. Moreover, the price setters do not seem to be

aware of what the others are doing.

A number of 14 municipalities have described their disregarding the legal rule and thus have acknowledged the alternative rule of estimation. However, they have not indicated nor detailed their definition of "estimation", which leaves a number of questions open about what estimation actually means. They seem to have avoided the conceptual valuation problem.

A double-sided²⁵⁸ rule occurred in 4 municipalities stating that the valuation was done based on acquisition or estimation.

A few mentioned that the acquisition value was preferred, but in cases of no acquisition information an estimation was worked out. Thus, some items were valued at acquisition cost and other items were estimated. Unsatisfactory, the empirical findings do not reveal some guidance to interpret which parts obtained what valuation rule.

²⁵⁸ The term double-sided rule means that the rule contains more than one part (e.g. acquisition cost - estimation), but without indicating which particular subrule is applied for which part of the asset.

13.3.4.4.6 Buildings

The municipal immovable patrimony consists of the following natures of buildings:

- 212 Office buildings
- 213 School buildings
- 214 Industrial and exploitation buildings
- 215 Buildings for sports, culture and religion
- 218 Buildings without any specific destiny and monuments
- 219 Other buildings

Nature 218 Buildings without any specific destiny and monuments was not examined since this item must not be valued in the first balance sheet (art. 1 MD 30th Oct. 1990, modified by MD 1st Feb. 1994). Only the few experienced municipalities which have drawn up their first balance sheet 1st Jan. 1994 or were previously able to register some amounts on this item meanwhile. Due to its lesser importance the nature 219 Other buildings is not considered either.

Valuation practices in general

The buildings existing on 1st Jan. 1995 had to be valued according to their **acquisition value** or **construction value**.

(art. 1 MD 30th Oct. 1990, modified by MD 1st Feb. 1994)

The "or" does not mean a choice left to the municipality but concerns the way of acquiring the asset: by means of buying it or by means of building it.

Similarly as for other kinds of fixed assets the **value may be estimated** if the application of this legal valuation rule does not result in a **realistic view of the current value**, (art. 2 MD 30th Oct. 1990, modified by MD 1st Feb. 1994).

Consulting the first balance sheet 1st Jan. 1995 and the annual reports 31st Dec. 1995, the valuation rules across the

different kinds of buildings appeared to be identical²⁵⁹ for each municipality. The observed practices are represented in the next overview.

Table 13.12: Frequencies valuation practices buildings

Valuation Practices	Buildings 212, 213, 214, 215	%
Legal rule: Acquisition or construction value	12	17.9
Alternative rule:	55	82.1
* estimated value	14	
* estimated newly built value	1	
* rent value	2	
* insurance value	23	
* unclear rule	1	
* double-sided rule	14	
	----	----
	67	100%
Rule not disclosed in first balance sheet and in annual accounts either	2	
Rule not disclosed in annual accounts and no further information in study	19	
Data N/A	12	
Total	100	

There appears to be a serious variety of applied valuation rules for a balance sheet item that seemed to be strictly regulated.

"Legals"

Among the "legals" there is one municipality having defined the valuation rule as exclusively the acquisition value and there is another with exclusively the construction value. It is neither logical nor acceptable that the former bought every

²⁵⁹ The very rare differing valuation rules for buildings within the municipalities are disregarded.

building and that the latter built every building without buying any. Probably these strange findings are due to misunderstandings of accounting terminology or mistakes in editing the valuation rules.

The "legals" remain the minority and similar remarks can be put forward as above. Another explanation of the weak adoption of the strict legal rule could be the incurred difficulties of searching and finding the original invoices and documents representing the acquisition or construction value.

"Alternatives"

As is also the case for the valuation of other fixed assets, the "alternatives" have seldom motivated their ignoring the legal rule in terms of a more realistic view. The real reason for their deciding on the alternative rule is often the lack of historical and other data to support their valuation. This approach has nothing to do with the intention of art. 2 (MD 30th Oct. 1990, modified by MD 1st Feb. 1994), which should be the providing of a more realistic view of the current value.

The 14 municipalities applying an estimated value, of which 4 call it the estimated current value, do not disclose their **applied concept of estimation**. Therefore it is not at all clear which valuation method they have chosen:

- the indexed estimated historical value,
- the sales value,
- the newly built value,
- the rent value,
- ...

Precisely 1 municipality has defined its valuations as the estimated newly built value. Presumably the implied valuation is the insurance value although the rule is not phrased as such.

A kind of rent value is applied in 2 municipalities: one

defines the rent value as a function of the Cadastral Revenues; the other defines the rule as Cadastral Revenues multiplied by 75 and less the value of the land beneath.

The majority has chosen for the insurance value, which seems the easiest alternative. One just needs some information out of the insurance treaties and the work is done. However, as argued before the insurance value can seriously be criticized as a basis to value assets.

In one municipality the valuation rule is defined as follows (translated): "The value of the buildings is registered by means of the files or documents of this account."

This kind of statement does not contribute positively to the understandability of what financial accounting in municipalities is about.

Furthermore, a lot of double-sided rules occurred, of which 3 were in the form of a cascade meaning that first the acquisition value was prevailing, if not possible the second was selected and so on, etc. The double-side rules of the other 11 municipalities consisted of a combination of the following confusing rules:

* Acquisition - construction - insurance	3
* Acquisition - estimation	3
* Acquisition - estimation - insurance	1
* Acquisition - insurance	2
* Estimation - insurance	2

11

It remains very unclear as to what extent which part of these valuations were applied.

Lastly, 2 municipalities did not disclose any rule at all in the first balance sheet and in the annual accounts neither.

Concluding remarks

In terms of conformity with the accounting legislation and regulations, the unclear, double-sided and the non-disclosed $(1 + 14 + 2) / 69 = 24.6\%$ are not in compliance, although the others have not clearly defined their valuation rule either.

These empirical findings reveal that the selected rules are not made clear, that there are a lot of misunderstandings of terminology and of accounting principles as well; that the experienced do not feel strongly about applying the principles consistently; that there occurs a certain inventiveness in different valuation ideas; that there is a lack of coordination which might have been possible by installing an accounting implementation follow-up system in charge of chartered accountants or professionalised Oversight Bodies.

One could seriously argue that the traditional function of a chartered accountant could have been extended to a temporary additional function of follow-up, monitoring, adjusting the municipal accounting reform during its implementation phase.

This suggestion was also made by Butterworth, Gray & Haslam (FAM 1989) and had implicitly been the case during the accounting reform in hospitals in 1987 where chartered accountants had to be assigned for a yearly audit and thus had to operate as a monitor.

The consequences for the usefulness are rather negative, a fortiori since public sector accounting is not well understood and is just starting up in Belgium.

212 Office buildings

Except for some amounts²⁶⁰ gathered from the annual accounts 1995, the total of this asset was 6.9 bio BEF (i.e. 2.7% of the total balance sheets) as of 1st Jan. 1995 considering 97 of the 100 sampled municipalities.

Of these 97 municipalities, 4 do not disclose this asset. Of course, this is incredible since each municipality has and maintains at least its Town Hall. An explanation which is not easily acceptable, is the fact that the municipal office buildings have been fully depreciated. Indeed, if the date of acquiring the building preceeds at least 50 years²⁶¹ before 1st Jan. 1995, then the building would be depreciated completely and thus the net book value equals zero. This conceptual approach, which occurs also in other cases and which is now and then described in the Notes can seriously be criticized:

Firstly, such an approach might be the theoretical consequence of inventorying and ageing the buildings and other fixed assets, but it is not in conformity with the objectives of the accounting reform. It is just the aim of the patrimonial accrual accounting of measuring, recording and disclosing all of the actual assets even the ones that theoretically no longer exist.

Secondly, the asset is still existing and functioning. It is not correct to pretend its non-existence.

Thirdly, contrary to business enterprises, a municipality has to maintain its services as described by the legislator and thus the assets providing these services

²⁶⁰ The balance sheet information for 18 municipalities could not be obtained for 1st Jan. 1995, but just for the end of 1995. The figures as of 31st Dec. 1995 approximate fairly well the situation of 1st Jan. 1995.

²⁶¹ The legal lifetime is 50 years or in other words this kind of asset shall be depreciated over 50 years.

are maintained in their function. This last argument is an important issue in the public sector and implies a rather constant level of assets. Even the system of depreciation could be questioned²⁶².

If the absence of this asset were justified by the municipality not being the juridical owner, then the municipal annual accounts are in compliance with NARGC. On the other hand the concept of NARGC could be criticized in that the objectives of the accounting reform have been ignored. In other words, in that case the municipalities are not showing what they are supposed to do even if there were no ownership.

213 School buildings

Under the same conditions as above the total value of school buildings is about 10.8 bio BEF (i.e. 4.3% of the balance sheet totals). Exactly 11 mostly smaller municipalities have not disclosed this kind of asset. There are three possible interpretations:

- the municipality is not providing education itself but attributing subsidies to other forms of education;
- the school buildings exist but are all depreciated completely;
- the school buildings are not the municipality's property.

Unfortunately, the empirical findings did not provide a conclusion since the reasons for the zero balances are not clarified in the Notes.

²⁶² This kind of issue has existed for a number of years in the "debate" around valuation and depreciation of capital assets. In addition, this issue is still under discussion referring to CIGAR 6 (e.g. Lapsley & Pallot 1997; Cheng 1997). The issue is also considered in the part *de minimis* practices beyond.

214 Industrial and exploitation buildings

This balance sheet item stands for about 3.3 bio BEF and contains 18 non-disclosing municipalities. It could be understood that a number of municipalities do not dispose of industrial buildings, although similar remarks as above could set forward.

215 Buildings for sports, culture and religion

This nature appears to be important looking at a total of 20.5 bio BEF (i.e. 8.1%).

An important and interesting issue is the **ownership of churches and other religious buildings** such as chapels and parsonages.

According to NARGC municipalities should record the value of religious buildings of which the municipality is the proprietor. The sole criterion is just the ownership, nothing else, such as e.g.:

- the municipal function of the religious building: although nowadays not so apparent anymore, the tower and particularly the clockwork have traditionally an informative duty to inform the inhabitants of the hour of the day, to warn them against fire, etc. This function has created a habit that the maintenance and repair of the tower is at the expense of the municipality. One could have proposed to register only the tower as an asset;
- whether the municipal has signed agreements for the maintenance of the religious buildings without being the owner; in other words the responsibility for the church is not made a criterion;
- the fact that the municipality has financed the building of the church is not a criterion either, ...

A first major problem is the ownership: what does this mean?

The juridical ownership is very difficult to define in practice. Also Redant (1995, p. 38) complains about this topic and refers to the publication of Vandermoere & Dujardin (1986, p. 63) where churches and parsonages dating before the *Concordat of 26 messidor year IX* (i.e. 15th July 1801) are principally property of the municipalities by virtue of the *Law of 18 germinal year X* (i.e. 8th April 1802). The goods built or acquired by the municipality after the *Concordat* and serving for worship are owned by the municipality. Analogously for the church fabrics.

Comments and details regarding the accounting treatment of religious buildings were not often included in the Notes to the first balance sheets and even less in the annual accounts 1995. It is imaginable that some religious buildings were excluded avoiding debates and "charged" discussions. For example, in the municipality considered by Redant (1995, p. 38) an important, very old church was not included in the balance sheet for the above reason.

A second major problem is the valuation: what is the book value of a church?

In a certain municipality the religious buildings were valued in the first balance sheet as follows:

Chapel A, B: 500,000 BEF

Chapel C: 80,000 BEF

Church: 34,500,000 BEF

Is the meaning of this valuation:

- that these buildings are going to be realised based on those levels of book value?
- that the amounts serve to a justification of expenditures of the same amount?
- that the municipality will need those amounts if replacement becomes necessary?
- that the buildings can be sold for those amounts?

A third major problem is what to do with churches, chapels and parsonages older than 50 years? Should they be valued and disclosed or can one say that their net book value is zero because they have an age of more than 50 years, which will often be the case?

The nature 215 Buildings for sports, culture and religion is not disclosed in 2 municipalities, of which one is very small (2,000 citizens) and the other counts for about 11,500 citizens.

The municipalities sorted by the ratio Disclosed value nature 215 / number of citizens (i.e. the average value of these buildings per citizen) reveals amazing differences:

the 5 lowest²⁶³ are in the range of 101 - 415 BEF/cit. whereas the 5 highest are in the range of 26,476 - 34,388 BEF/cit., with one outlier of 100,157 BEF/cit. These figures are incredibly varying and it is very difficult to assess the completeness and valuation methods of the included fixed assets.

Among the many examples of disparities, there is the case of a municipality representing 20,000 cit. and showing the asset nature 215 for 24.5 mio BEF, whereas a neighbouring municipality having 35,500 cit. discloses 491.1 mio BEF.

Another case is a municipality with 42,700 cit. showing 207.6 mio BEF and another with merely 12,000 cit. disclosing also about 209.2 mio BEF.

These figures which are no exceptions in the observations are also hard to reconcile because the services in the sphere of sports, culture and religion are spread over all municipalities; there are no municipalities refusing/

²⁶³ The 5 lowest and the 5 highest are indeed extremes, but they are not outliers; with all the others they form a rather continuous series.

disallowing their citizens this kind of services. On the other hand an explanation for the differences could be that such buildings are not juridically owned by the municipality but by other organisations, such as intermunicipal organisations, NFPOs, etc.

If this is the reason then it would be interesting to set forward the ideas and concepts about reporting on a political accountability concept instead of on just a juridical ownership concept in order to inform the reader of the municipal activities of the social/economic reality irrespective of the juridical form behind it.

13.3.4.4.7 Networks

The municipal networks consist of following natures:

235 Sewers

236 Waterpipes

237 Other networks

The networks existing on 1st Jan. 1995 had to be valued according to their construction value or current cost price per meter according to the type multiplied by the length in meters (art. 1 MD 30th Oct. 1990, modified by MD 1st Feb. 1994). No other alternative valuation rules are allowed.

235 Sewers

The frequencies of the different practices are as follows:

Table 13.13: Frequencies valuation practices sewers

Valuation Practices	Sewers 235	%
Legal rule: First option: production value	10	16.7
Legal rule: Second option: current cost per meter * length	50	83.3
Alternative rules	-	-
	-----	-----
	60	100%
Ambiguous rule: choice of first or second option not clear	5	
Double-sided rule: some parts get first option, others second option	2	
Rule not disclosed in first balance sheet and in annual accounts either	3	
Data N/A	30	
Total	100	

The majority has chosen for the second legal option and no one has applied an alternative rule as foreseen in art. 2 (MD 30th Oct. 1990, modified by MD 1st Feb. 1994). Apparently, the first two options were giving enough opportunities to value the sewer networks.

In terms of conformity with the accounting legislation and regulations, $(5 + 2 + 3) / 70 = 14.3\%$ are not in compliance, although even the others have not always clearly defined their applied valuation rule.

The examination reveals that every municipality out of the 96 usable ones has recorded this kind of asset as of 1st Jan. 1995, which could be expected. Under reservation of some amounts gathered²⁶⁴ from the annual accounts 1995, the total of this asset was 24.0 bio BEF (i.e. 9.5% of the total balance sheets) as of 1st Jan. 1995.

Sorting the municipalities by the value of the sewers per citizen leads to the 5 lowest²⁶⁵ municipalities with a price level range of 3,700 - 5,566 BEF/citizen whereas the 5 highest are in a range of 26,138 - 32,180. The spread between the lowest and the highest is about factor 8.7 (i.e. $32,180 / 3,700 = 8.7$). Compared to the nature 215 where the spread is $34,388 / 101 = \text{ca. } 340$ (the one extreme outlier of 100,157 BEF/cit. left out), these findings are quite remarkable and interesting.

Although the spread for the value of the sewers per citizen is smaller than the spread for other fixed assets the figures are still surprising. Following eye-catchers are picked out:

²⁶⁴ For 20 municipalities the figures of 31st Dec. 1995 were taken because the data of 1st Jan. 1995 were not available. The surrogated amounts remain fairly representative.

²⁶⁵ For reasons of simplicity only the 5 lowest and the 5 highest are discussed. These figures are extremes but no outliers since they are element of a continuous curve.

* in the sorted array of sewer values per citizen the smallest municipality in the sample having 1,000 citizens reveals a ratio of 4,610 BEF/cit. which is just next to the ratio (5,145 BEF/cit.) of the largest municipality in the sample having 228,000 citizens.

* the largest municipality (228,000 cit.) shows sewers for a value of 1.2 bio BEF whereas a municipality having just 67,000 citizens shows 1.8 bio BEF, which is 50% in plus. Such findings are however questionable and necessitate a critical approach. In volume of sewers it is obvious that the larger municipality is superior²⁶⁶ to the smaller. In price, it is hard to believe that the smaller one would have to a large extent a new and expensive sewer network which is at least 50% more expensive or that the larger one would have an old worn out network of sewers.

In order to inventory and valuate the sewers, municipalities have called in the intermunicipal organisations and distributors taking care of the use and maintenance of sewers and other networks. It could be assumed that therefore the spread of valuation is a lot less than for the other natures of fixed assets. Moreover, inventorying networks is a more technical issue and perhaps easier since some maps exist and since it is a technical matter belonging to the construction industry.

Hereafter, the two options of valuation rules are compared with respect to their different impact on measuring the sewers. In order to be able to compare municipalities of different sizes, the disclosed amounts are related to the size of the municipality measured in number of citizens. This approach assumes that the number of citizens is a representative factor for the volume of sewers.

²⁶⁶ The surface of the largest is 15,632 ha; the smaller's surface is 10,234 ha.

The outcomes were as follows:

	1st option production value	2nd option current cost per m * length
Number	10	49 ²⁶⁷
Average	15,184	15,055
Standard deviation	4,889	5,544

The statistical test is a t-test because the data are of the ratio-scale and the samples are independent.

1. Null hypothesis:

H_0 : There is no difference in average valuation per citizen between municipalities having applied the first option vs. municipalities having applied the second option.

H_A : The first option is leading to a different value per citizen compared with the second option.

2. Significance level

Alfa = 0,05 (two-tailed test)

3. Calculated value (Emory 1980, p. 423)

$$t = (X_1 - X_2) / (s_1^2/n_1 + s_2^2/n_2)^{1/2}$$

$$t = (15,184 - 15,055) / (4,889^2/10 + 5,544^2/49)^{1/2} = 0.074$$

$$d.f. = (n_1-1) + (n_2-1) = 9 + 48 = 57$$

4. Critical test value (two-tailed) (Emory 1980, p. 509): 2.000; 1.671 at alfa 10%.

5. Decision: Since the calculated value is smaller than the critical value the analysis fails to reject the null hypothesis. Therefore, there cannot be concluded that there is an empirical difference in the applied valuation options.

Apparently, the differences are not caused by the two different options.

Regarding the second option of valuing the sewers, the unit prices could be examined empirically in 31 municipalities based on the provided data in the first balance sheet and in the annual accounts.

Apart from 2 municipalities which have solely used fixed rates, the other 23 have set different rates in respect of the

²⁶⁷ There are actually 50 municipalities having applied the 2nd option, but for 1 municipality the amount is not available in the study.

diameter of the sewers. A few 5 have even diversified the rates based on the kind of profile, material of the sewer and on whether the depth was plus or minus 2.5m. Lastly, 1 municipality has just diversified the rates according to single or double sewers, but fixed in respect of the diameter.

Just to give an impression a diameter range of sewers of 30 < 50cm was arbitrarily taken out. The following rates occurred²⁶⁸:

Table 13.14: Frequencies rates per m second option sewers

Ranges of rates	Frequencies
1,000	1
2,000-2,500	8
2,000-6,000	1
2,300-2,875	1
2,400-2,500	1
2,850-3,900	1
3,000-3,150	1a
3,000-4,000	1
3,150-4,300	1a
3,200-3,500	1
3,400-4,400	1b
3,400-5,400	1
3,500-4,000	1
3,900-4,900	1b
3,961-4,205	1
5,755-6,000	1
6,000	4c
6,000-6,350	1
6,931-7,529	1
10,000	1c
Total	30

Apparently, the applied rates vary a lot across the municipalities; there seem to be two clusters of ranges 2,000-2,500 and 6,000.

Since a lot of municipalities have applied different rates, it

²⁶⁸ The reconciliation between the abovementioned number of 30 and the total of the following table (i.e. 31) is as follows: data available from 31 less 4 of which the particular numbers are not known plus 3 municipalities having two series of prices (a, b, c) equals 30.

is obvious that these differences are not simply explainable by just different qualities, profiles and materials of sewers.

What is also important are the inspection holes and other certain constructions which are built on the sewers but which are not directly in relationship to the length.

Of the 31 considered municipalities 3 stated literally that the value of these additional parts were included in the price range per meter; that a separate valuation had taken place was announced in 8 municipalities, but the remaining 20 municipalities did not disclose any clarification as to whether or not these separate parts were included in the price per meter. This kind of features seriously distort the figures and thus a correct and adequate interpretation of the actual valuation methods becomes difficult.

Again, the findings seem to indicate that the differences across the municipalities are larger than the differences due to the officially chosen other option. In other words, the choice of the option and the naming of the option does not matter; it is the actually decided valuation level itself which counts.

236 Waterpipes and 237 Other networks

The frequencies of the different practices are as follows:

Table 13.15: Frequencies valuation practices networks

Valuation Practices	Water- pipes 236	Other networks 237
Legal rule: First option: production value	4	2
Legal rule: Second option: current cost per meter * length	2	2
Alternative rules	- ----- 6	- ----- 4
Ambiguous rule: choice of first or second option not clear	2	2
Double-sided rule: some parts get first option, others second option	1	1
Rule not disclosed in first balance sheet and in annual accounts either	2	1
No disclosure but motivated	5	4
No disclosure without motivation	60	63
No disclosure and no further information in study	15	15
Data N/A	9	10
Total	100	100

The majority did not record any waterpipes or other networks. Only a minority motivated why they did not do so: for the waterpipes 3 disclosed that they are not the owner and 2 clarified the non-disclosure by pointing at their "ordinary" municipal enterprise. The 4 which motivated the non-disclosure for other networks were also the ones that gave a motivation for not recording the waterpipes.

In terms of conformity with the accounting legislation and regulations, only the ones with the two rules and those which motivated the non-disclosure $(4+2+5) / (100-15-9) = 14.5\%$ are in compliance for the waterpipes and even worse $(2+2+4) / (100-15-10) = 10.7\%$ for the other networks.

13.3.4.4.8 Public lighting

The nature 238 public lighting existing on 1st Jan. 1995 had to be valued according to its **construction value** (art. 1 MD 30th Oct. 1990, modified by MD 1st Feb. 1994)

Similarly as for other kinds of fixed assets the **value may be estimated** if the application of this legal valuation rule does not result in a **realistic view of the current value**, (art. 2 MD 30th Oct. 1990, modified by MD 1st Feb. 1994).

It is quite obvious that in each municipality a public lighting system exists. Contrary to this point of view the empirical findings point out that 9 municipalities of different sizes have not at all disclosed their public lighting without any motivation in the first balance sheet and in the annual accounts 1995 neither. Inspired by the particular figures presumably 1 municipality has classified the contents of nature 238 elsewhere in another nature 234 *Accessories of the roads*.

Apart from 3 municipalities for which the data were not available, the other amount for the other 88 municipalities reflects about 3.3 bio BEF as of 1st Jan. 1995²⁶⁹.

Looking at this kind of fixed asset in respect of the size of the municipality measured in number of citizens, results in an incredible range of 3 to 16,103 BEF per citizen.

The 5 lowest are characterised by a range of 105 - 215 BEF/citizen with the outlier of 3 BEF/citizen.

The 5 highest have a range of 4,020 - 5,605 BEF/citizen with an outlier of 16,103 BEF/citizen. As a matter of fact this last one is the second largest capital amount in absolute figures whereas the municipality merely has 20,000 citizens.

²⁶⁹ For 18 municipalities the figures are taken from the annual accounts 31st Dec. 1995 due to the fact that the first balance sheet figures were not available. These surrogated data are fairly representative.

It might be interesting to examine further the dimension of neighbouring municipalities and their differing valuations of networks and public lighting. After all, it could be assumed that networks such as sewers, waterpipes, etc. are more or less similar in neighbouring municipalities or at least among municipalities ressorting under the same intermunicipal organisation, region, ...

An acceptable explanation for the occurring very low figures per citizen could be the fact that a municipality consists of some submunicipalities owning its public lighting whereas the rest of public lighting is owned by another organisation. Unfortunately, this kind of information is just scarcely provided in the annual reports.

Even if sometimes certain natures such as 236, 237, 238 are disclosed for rather small amounts, it remains impossible to assess the underlying scope of which assets are taken into account and which are left out if clarifications are not paid attention to.

An example is a municipality showing a net book value for public lighting of 30,462 BEF. What to think about this disclosure? It is rather unbelievable that the whole public lighting is incorporated; on the other hand there is something disclosed. Another guess could be that the municipality does not disclose any public lighting achieved before 1st Jan. 1995 for whatever reason, but starting in 1995 acquisitions of public lighting are being recorded.

13.3.4.4.9 Art patrimony

In drawing up the first balance sheet the value of the art patrimony²⁷⁰ (nature 340) is the **insurance value** by virtue of art. 1 MD 30th Oct. 1990, modified by MD 1st Feb. 1994.

As is the case for most of the fixed assets the **value may be estimated** if the application of this legal valuation does not provide a **realistic view of the current value** (art. 2 MD 30th Oct. 1990, modified by MD 1st Feb. 1994).

Importance of art patrimony

In the first balance sheet 1st Jan. 1995 70 municipalities (= 55 - 3 zero balances + 18) disclosed a particular amount for art patrimony. The modal category of 24 municipalities lies within the range of 1 to 5 mio BEF. The median is about 1.6 mio BEF and 3 municipalities exceed the level of 500 mio BEF, one of which is an outlier with an amount of 8.7 bio BEF.

Table 13.16 illustrates the applied valuation rules of the movable art patrimony concentrating on the first balance sheet disclosures.

Apparently, only 19 municipalities (i.e. 34.6%) have complied with the predefined rule whereas 23 (i.e. 41.8%) apply an alternative rule. Hardly any municipality disclosed the motivation of applying the alternative rule as imposed by the above art. 2 (MD 30th Oct. 1990, modified by MD 1st Feb. 1994). The built-in condition of a **realistic view** of the current value seems to be either forgotten or denied.

The inadequate rules count for 23.6% and consist of double-sided, ambiguous and missing rules.

²⁷⁰ The nature 340 Art patrimony only concerns movable art patrimony. Historical buildings, bridges, etc. which can be called works of art are to be classified in the according natures of immovable patrimony.

Table 13.16: Frequencies valuation practices art patrimony

Valuation practices	Frequencies	%
Legal rule: insurance value	19 ^a	34.6
Alternative rule:	23 ^b	41.8
* Estimation	18	
* Acquisition value	4	
* Forced sale value	1	
Inadequacies	13	23.6
* Double-sided rule	6	
* Ambiguous rule	4	
* No valuation rule disclosed	3	
	-----	-----
	55	100%
No disclosure without motivation	15	
No disclosure but motivated	3	
Disclosure of art patrimony, but no further data ^c in study	18	
No disclosure of art patrimony and no further data in study	6	
Data N/A	3	
Total	100	

^a Of which 2 with a zero balance.

^b Of which 1 with a zero balance.

^c This signifies that the valuation rules or comments might well have been published, but that they were not available for this study due to a number of missing first balance sheets.

Apart from a few municipalities to a certain extent, no comment was included in the Notes as to what estimation objective is actually used. It is not clear whether it is the normal sales value, the forced sales value, the acquisition cost, the cost of replacement, the cost of capitalised maintenance or anything else. They just mention the term "estimation".

Furthermore, often it is not even clear which works of art are actually valued. The reader of the annual reports is not well informed about the qualitative scope of properties and is kept guessing. It is not made clear which part of the art patrimony belongs to the municipality, which parts belong to other organisations but have to be safeguarded and maintained on

behalf of the municipality, which parts have been achieved for free, which ones were purchased or are heritage of the past.

In 15 municipalities there is no mentioning of art patrimony whatsoever nor is any motivation included. This kind of reporting practice could certainly be questioned in light of the objectives of the accounting reform. Only 3 have motivated their zero balance, 2 of which stating that there simply is no municipal art patrimony and the third one stating that the art patrimony is not sufficiently relevant to be reported.

Critical considerations

An example of a factor causing implementation problems is the obligatory insurance valuation of the art patrimony. This rule can seriously be criticized. *Firstly*, not every work of art is insured externally and thus it need not be valued²⁷¹. *Secondly*, the insurance value has less to do with the value of an asset but with the level of risk one prefers to cede. *Thirdly*, there is a variety of possible treaties with different engagements and priorities covering different risks (theft, burglary, destruction, maintenance, ...).

Most of the municipalities have avoided this insurance valuation by estimating the value. But, due to a lack of conceptual framework, the practical problems remain: to which extent does the value need to be estimated and for what purpose is this done?

²⁷¹ There are at least a few cases of first balance sheets for which the existence of municipal art patrimony was admitted, but no value was attributed since literally the art patrimony was *not insured*. Such a striking notice is opposite to the aim of the accounting reform, viz. to improve the transparency of the municipal patrimony.

13.3.5 Fixed assets movements schedule

The fixed assets movements schedule²⁷² is regulated by the Circular Letter BA/FB 96/3 and has to be disclosed in the Notes.

Table 13.17 reveals that 79 (i.e. $79 = 100 \text{ Total} - 7 \text{ Data N/A} - 14 \text{ No disclosure}$) municipalities out of 93 available data have disclosed a fixed assets movements schedule (i.e. 84.9%).

However, of those 79:

- * there are 9 municipalities which have not detailed the schedule on the level of the nature, but in summary;
- * 3 municipalities have enclosed revaluations and depreciations as of 31st Dec. 1995, but without showing any movements in these items;
- * 1 municipality is presenting a schedule containing movements in general, without any detail of the kind of movement.

These adjusted figures result in an **actual compliance rate** of $64/(64+27) = 70.3\%$. It can be noticed that even the experienced municipalities score very poorly. Of the 11 experienced only 5 (i.e. 45.5%) are in compliance with the regulations.

The empirical findings regarding fixed assets movements schedules are enclosed in Appendix IX. The schedules are classified according to their kind of contents; the lay-out of the schedule is not *per se* a distinguishing factor. The frequencies are shown in table 13.17.

²⁷² The contents of this schedule is described in Chapter 4, 4.1 EXTENT OF COMPLIANCE.

Table 13.17: Frequencies disclosure practices schedules

Disclosure Practices	Frequencies	Freq. ex- per. mun.
<i>In compliance with regulations</i>		
Model Euraccounts	21	2
Model Moores & Rowland	14	-
Ad hoc incl. characters	6	1
Ad hoc 7	7	1
Ad hoc 6	6	-
Ad hoc 5	5	-
Ad hoc 3	3	-
Ad hoc 2	2	1
	-----	-----
	64	5
<i>Not in compliance</i>		
Schedule not per nature	9	3
Schedule without movements of revaluation, depreciation	3	1
Schedule without any detail of the kind of movement	1	-
No movements schedule	14	2
	-----	-----
	27	6
Movements schedule present, but further information N/A	2	-
Data N/A	7	-
	-----	-----
	9	-
Total	100	11

The municipalities applying the models developed by Euraccounts and by Moores & Rowland are not exactly the same as the municipalities having called in Euraccounts and Moores & Rowland as a consultant.

One of the "Euraccount"-municipalities has not disclosed any schedule, another did disclose a schedule, but it was not worked out per nature; on the other hand 2 non-Euraccounts municipalities did apply the Euraccounts model. Apparently, sometimes some copying of models and software takes place.

Among the municipalities having called in Moores & Rowland one has disclosed a schedule but with cumulative figures and thus not showing the movements in revaluations and depreciations. For another "Moores & Rowland"-municipality the data are not

yet available.

The schedules of municipalities using the M&R and EUR models cover most of the aspects in a professional way and are almost complete, although not identical: M&R's schedules are the only ones additionally showing the acquisitions "For free" and "Own work capitalised" separately. On the other hand they do not show separately the acquisitions in "Extraordinary maintenance" whereas the Euraccounts' model does.

It is true that some items are redundant and could be deducted algebraically (e.g. acquisition cost at the end of the year or depreciations at the end of the year). However, looking at Appendix IX. it is remarkable that in municipalities where these items are presented the ingredients are also presented whereas in municipalities not showing these items the ingredients are not shown either.

The ad hoc's with numbers are clusters of municipalities working likewise often having exchanged information, approach and software and often located in the same region. The ad hoc's with characters are those municipalities each presenting their own schedule.

Furthermore, the lay-out of all the schedules varies strongly across municipalities; some are in landscape, others in portrait; some have a predefined lay-out, others size the schedule depending on the occurrence of items. Also the terminology differs a lot.

Apart from the issue compliance the fixed assets movements schedule has to be comparable among municipalities since the schedule is to provide relevant comparable data for financial analysis.

The obvious conclusion is that the spread of different forms and contents is rather amazing even among the experienced municipalities, which is demonstrated in the C-indices (see Chapter 15). One could have assumed that the cross-sectional

variance between experienced municipalities would be lower than among the others. Surprisingly, this is not so and one could extrapolate this finding to the future, positing that the municipalities are not going to reconcile the different reporting approaches since the experienced ones have not done so either.

For the legislator or standard-setter it would be a contribution to set forward an obligatory reporting system with predefined codes or a protocol resulting in comparable data and data which are possible to aggregate. As a matter of fact this kind of know-how and experience has already existed for a number of years concerning the published annual accounts of private enterprises.

13.3.6 Investments

By virtue of art. 1 MD 30th Oct. 1990, modified by MD 1st Feb. 1994 investments such as shares in governmental and private enterprises have to be valued at their acquisition cost (possibly increased by the uncalled capital). In addition, art. 1 states that this acquisition cost is to be increased by a revaluation reserve if this revaluation is real and permanent.

Unfortunately, it is not quite clear what exactly this rule means. Is it the historical acquisition value, which normally must have been the share in the initially called up capital? Or does it mean the share in the current called up capital? Or does art. 1 imply that one should take the share in the value of the capital and reserves to date?

13.3.6.1 Shares Gemeentekrediet

Focusing on the shares of Gemeentekrediet²⁷³, the valuation practices as reported in table 13.18 occur.

Apparently, the only two methods applied are historical acquisition cost without any revaluation whatsoever (10,000 BEF per share) and the share in the current called up capital (42,857 BEF per share). No one applied a current revaluation to the intrinsic value, which would have lead to a valuation of 3 to 4 times the share in the issued capital, i.e. ca. 145,000²⁷⁴ BEF per share.

²⁷³ Since Gemeentekrediet is the mutual bank of all Belgian municipalities and each municipality is owner of such shares, a comparison is possible. The called up capital of Gemeentekrediet (GK) 31st December 1995 was 15,000 mio BEF representing a number of 350,000 shares; the resulting value per share is 42,857 BEF.

²⁷⁴ Gemeentekrediet's annual accounts 31st Dec. 1993 showed a net worth of 50,232 mio BEF.

Table 13.18: Frequencies valuation shares Gemeentekrediet

Valuation rule	Unit value (BEF)	Frequency	Exper. Municipalities
Historical acquisition value	10,000	16	3
Share in current called up capital	42,857	77	7
Share in net worth	145,000	-	-
No value	0	1	-
Rule unclear	8,000	1	1
" "	45,714	1	-
" "	52,824	1	-
Data not available	-	3	-
Total		100	11

It could be argued that the weak and differing adoption of this valuation rule is due to the first drawing up and to the lack of knowledge on how to define the first value. However, even the experienced municipalities are still dealing with a weak and differing adoption whereas the adjustments of initially recorded values (e.g. 10,000 BEF) could have taken place by now.

13.3.6.2. Other investments

These investments mainly represent shares in intermunicipal organisations taking care of water distribution, public utilities, social care, etc. Such organisations have the juridical form of corporate enterprises and dispose of equity capital. Organisations which are controlled by the municipality or by its Executives but without having equity capital, can hardly be disclosed as investments in the municipal balance sheet. Showing the financial relationships with such non-profit organisations could well be as important as for corporate enterprises. Thus, whether or not disclosing interests in the annual accounts depends strongly on the form

of the organisation, not on the kind of relationship or controllership.

Each municipality disclosed investments in the balance sheet, although the applied valuation rules are scarcely clarified and difficult to interpret correctly.

Municipalities have to detail their investments in the Notes including the number and value per share. Of the 94 considered municipalities, there are 54 showing detailed information per share, though 15 of these omitted numbers or values per share. However, 40 municipalities, of which 2 are experienced municipalities do not disclose any detail about their investments at all.

It is also remarkable that municipalities having called in Moores & Rowland as a consultant are all represented in the disclosing group (54) whereas municipalities related to Euraccounts mainly belong to the last non-disclosing group (40).

13.3.7 Stocks

Except for just 1 municipality²⁷⁵ where a fixed stock is disclosed, stocks have not at all been accounted for in the other 94 municipalities²⁷⁶. It is obvious that each municipality does have stocks, but there seem to be different opinions as to the necessity and desirability of disclosing them.

Some municipalities defend the non-disclosure by expressing in the Notes that art. 23 NARGC creates the **opportunity**, not the **obligation**²⁷⁷ of a stock management system. Furthermore, they argue that the legislator has announced to work out more precise inventory valuation rules in the future.

However, allowing the possibility of a stock management system does not mean that the stock disclosure is just a possibility. The compulsory *Chart of Accounts*²⁷⁸ contains the inventory accounts and as a matter of fact, the lay-out of the annual accounts defined by MD 10th January 1996 includes the disclosure of inventories as a separate balance sheet item.

The importance of these stocks (e.g. construction and maintenance goods) should not be overstressed, but stock accounting information would contribute to the pursued improvement of municipal management, which is one the aims of the accounting reform.

²⁷⁵ In a preliminary field research considering 8 municipalities there was also one other municipality which is not included in the present sample, showing inventories on the balance sheet (Christiaens 1996a).

²⁷⁶ In a sample of Dutch municipalities regarding the annual accounts of 1985, Volmer (1992, p. 224) found that 11 of the 25 were disclosing inventories for relatively small amounts.

²⁷⁷ Verbeken 1995, p. 57.

²⁷⁸ MD 30th Oct. 1990, modified by MD 25th March 1994, modified by MD 29th April 1996.

13.3.8 Classification and compensation

13.3.8.1 Classification: sign tests

The findings reveal that in certain annual accounts some balance sheet items are disclosed with a wrong sign. In order to examine the background and frequency of this accounting practice, three general sign-tests²⁷⁹ were conducted on the 95 municipalities.

The results are shown in table 13.19 below.

Table 13.19: Sign-tests: number of municipalities

Sign tests	Acceptable sign (A)	Negative sign (B)	Cases	Total (A) + (B)
Sign assets	87	8	9	95
Sign liabilities	77	18	20	95
Sign P/L account	95	0	0	95

Testing the correct sign of the assets-side revealed 9 irregularities, 2 of which occurred in the same municipality.

There are several reasons for these negative signs:

- * In 3 cases accruals and deferrals were negatively disclosed; there is no specific explanation other than a misclassification. Those balances should have been transferred to the liabilities-side.
- * In 3 cases prepayments were recorded on an account of the assets-side terminologically confusing debtors with creditors. This has led to showing a negative amount on the assets-side.

²⁷⁹ Sign-audit tests:

1. All disclosed assets should be accompanied with a positive sign, except for IX.C 56/58 Payments in transit which always should have a negative sign and cash in hand and at bank that can be positive or negative (according to NARGC cash at bank with a negative balance shall be disclosed negatively on the asset-side).

2. Besides I' 10 Capital and III'A'B'C' 13 Accumulated results for which both signs can occur, all liabilities should principally have a positive sign.

3. In the P/L Account all items should be accompanied with a positive sign.

* 2 cases concern the irregular recording of a redemption of loans and short-term investments.

* In the last case the total of recorded depreciations exceeds the value and thus results in a negative asset.

On the liabilities-side there are also a number of unexpected signs (see table 13.19).

* 11 times a negative balance occurs on the account 45400 *Contributions RSZPPO*²⁸⁰ falling due. An explanation for this could be the fact that the payment of this kind of creditor has taken place before the registration of the basic voucher incorporating the debt.

* A second type is account IX' 48100 *Activities for third parties* occurring 5 times with a negative sign. Probably, this kind of misunderstanding is due to the habit of systematically treating certain creditors in a fixed way as part of the liabilities even if a debit balance occurs.

* In 2 cases the account 45500 *Net Salaries Payable* has a debit balance leading to a negative liability. This debit balance is caused by posting the journal entry²⁸¹ of the payment without having entered the corresponding journal entry of crediting the debt.

* The remaining 2 cases are miscallaneous: 15117 *Received Investment Subsidies* and 45310 *Taxes payable*.

On the P/L Account negative signs did not occur.

²⁸⁰ RSZPPO = "Rijksdienst voor de Sociale Zekerheid van de Provinciale en Plaatselijke Overheden". This is an official mutual service for governmental authorities.

²⁸¹ 45500 Net Salaries Payable X Dt
 @ 55000 Cash at bank and in hand X Ct

13.3.8.2 Misclassification pension contributions

The responses on question II-2 of the questionnaire revealed that all 95 considered municipalities are at least partly insured by RSZPPO for pension funding of municipal personnel. This implies the accounting practice of recording the employer's contributions on the G/L account 62401 *Employer's contributions to the fund for municipal pensions*²⁸².

However, the empirical findings reveal that 19 of the 95 (i.e. 20%) municipalities have not applied the appropriate account. Besides a non-recording which would be not likely, the reason is in all probability a misclassification or in other words a shortcoming in entering on the correct G/L account. In the Notes there are no traces or clarifications why this recording should not have been entered.

Stressing on just the 19 misclassified journal entries could be criticized. Indeed, the weakness of this kind of test is the bias of focusing on just the municipalities which have a zero balance. One must keep in mind that the municipalities having a balance that is too small or too big where misclassification also partly could have occurred are not sanctioned. Therefore the findings might be even worse in reality.

Looking closer at those 19 municipalities one could wonder whether the experienced municipalities, the municipalities having bookkeepers with business accounting experience at their disposal and the municipalities having called in a professional consultant are systematically better off.

These data are summarised in the accompanying table 13.20.

²⁸² The pension financing for the municipal personnel of 2 municipalities is insured by the private insurance company OMOB and the employer's contributions are accordingly registered on the G/L account 62429 *Employer's contributions to other pension funds*, which is in compliance with NARGC.

Table 13.20: Explaining factors misclassification pension contributions

Attributes	Recorded 62401	Not- recorded 62401	Total
Experienced municipalities	10 100%	0 0%	10
Bookkeepers with business accounting experience	22 81%	5 19%	27
Professional consultants ^a	28 78%	8 22%	36
Generally	76 80%	19 20%	95

^a Euraccounts or Moores & Rowland.

For the factors "bookkeepers having business experience" and "professional consultants" the null hypothesis that there is no influence at a significance level of $\alpha = 5\%$ or 10% could not be rejected using a X^2 test. For the factor "experienced municipalities" the X^2 test was substituted by a binomial test since the level of degrees of freedom was 1 and the expected $n \leq 5$ (Emory 1980, p. 416). Although seemingly important the factor "experienced municipalities" did not reveal a significant relationship ($\alpha = 10.7\%$). Considering the three attributes these significance tests do not reveal a significant influence on the incorrect classification.

13.3.8.3. Compensation

Compensation can be defined as adding positive and negative balances of the same group of accounts and showing the compensated sum whereas the sum should be disclosed separately, divided in a sum of the positive on the one hand and in the sum of the negative on the other hand. The adding up of complementary accounts (e.g. Fixed assets value Dt plus Recorded depreciations Ct) is of course not perceived as a compensation.

An example of a particular case is as follows:

<u>Debtors falling due within one year</u>		
According to the balance sheet:		885,370
According to the trial balance:		
41513 Creditinterests receivable	CS	2,318,282
41514 Call in of financial costs	DS	2,777,623
41516 Dividends receivable	DS	426,029

		885,370

There is a relationship with the classification above in that many of the cases where a negative sign occurs, can be explained by compensation.

Based on the annual accounts compensation occurred in the following balance sheet items with a total of 24 cases representing 20 different municipalities (the cases of compensation which have led to a negative sign are not repeated anymore here):

Assets

* Debtors receivable:

VII.B.2 Subsidies, gifts, ... receivable	1 case
VII.B.3 Interests and dividends receivable	1 case

Liabilities

* Creditors payable:

VIII'A'1 Redemption falling due within one year	1 case
VIII'B' Trade creditors	2 cases
VIII'C' Other creditors including taxation and social security ²⁸³	15 cases
VIII'D' Other amounts payable	3 cases

* Accruals and deferrals:

X' Accruals and deferrals	1 case
---------------------------	--------

total: 24 cases

²⁸³ 11 of these cases are similar with the remark above about account 45400 Contributions RSZPPO, but the compensation was not strong enough to change the sign of the item.

These accounting practices characterised by the possible compensation and negative signs could be defended by arguing that the legally defined Chart of Accounts prevents accounting adjustments thereof. It is indeed difficult to adjust this kind of irregularities since the Chart of Accounts is strictly defined and cannot easily be modified or enlarged in respect of the specific situation.

Compared with other legally defined accounting systems the municipal accounting system in Belgium is more or less an exception. In the other systems²⁸⁴ there is always the possibility to adapt or extend the Chart of Accounts in respect of a particular situation.

However, even if a journal entry adjustment were not possible, the municipality in question could clarify this unsuccessful, misleading and wrong sign, which none of the 95 examined municipalities did in their Notes.

13.3.8.4 Concluding remarks

In summary, the findings indicate that in a number of cases the financial view is unsuccessfully influenced by misclassification and compensation. Probably, these misclassifications are not caused by errors, but are due to the dominant formal system of classification instead of reporting the actual economic contents. For example, social debts are permanently being perceived as debts even if a negative balance occurs.

Secondly, there appears to be a prevalence of recording formal journal entries without focusing on the (economic) fact behind

²⁸⁴ Some examples:

* The Chart of Accounts has a minimum of defined obligatory accounts, but is freely expandable:

- Business Accounting (MAR), RD 10th October 1976,
- Accounting in Hospitals (MARZ), RD 14th August 1987,

* The Chart of Accounts is not defined; just the lay-out of the annual accounts is obligatory:

- Accounting Pension Funds, RD 19th April 1991
- Accounting Insurance Companies, RD 17th November 1994.

it. In other words, not the transaction is recorded by means of the representative document; the (officialised) **document itself** is seen as the fact and is as such recorded. Or in figurative language: *"It is the label that is recorded, not the transaction represented by the label"*.

A third conclusion is that there is no guarantee that the found incorrect disclosures are the only ones. In the municipal accounting regulations this problem is not enough taken care off. Therefore, the risk remains that for the annual accounts 1996 this is going to happen again, since there is no regulated professional external audit assigned to detect or prevent this either.

Anyway, these practices are not in compliance with the regulations²⁸⁵ and disturb the use and the interpretation of the annual accounts as well as the comparison between compensated and non-compensated items.

²⁸⁵ Art. 1 NARGC; Martens, Umans & Blomme 1992, p. I-66.

13.3.9 Amounts receivable within one year

13.3.9.1 Doubtful debtors

The accounts 407 and 417 *Doubtful debtors* were only applied in 5 municipalities of the 95 usable data, which constitutes a poor rate of compliance.

One could defend this low rate by arguing that not every municipality has encountered doubtful debtors. However, in the definition of the construct²⁸⁶ a motivation is given. A second mentioned motivation is the occurrence of recorded 67111 *Exceptional costs Ordinary Service*, of which only 8 municipalities have not disclosed a balance, which implies the factual existence of doubtful debtors.

Attempting to explain the very poor compliance one could of course admit that the doubtful debtors need not be recorded since the loss on debtors may not be recorded before the municipal decision to put the debtor in "non-value", which means a cancelling of the debtor.

13.3.9.2 Debtor taxes

The empirical findings reveal that 7 of the 95 municipalities have not disclosed debtor taxes as of 31st December 1995. Looking at the motivation provided in the definition of the concept it is reasonable to assume that those amounts should have been accounted for. The observed non-compliance implies either a non-recording of the debtor or a misclassification of the debtor.

²⁸⁶ See Chapter 4, 4.1 EXTENT OF COMPLIANCE.

13.3.10 Provisions for risks and charges: pension provisions

By virtue of specific legislation, municipalities have to provide pension plans for their municipal personnel (appointed) and for the Mayor and Aldermen²⁸⁷ (mandated) as well.

Municipalities may autonomously²⁸⁸ develop their own pension plans within the framework of the legal requirements. In other words the municipalities may play the role of pension-insurer themselves or they may cede these pension risks to an independent life-insurance company²⁸⁹ or to an external pension fund²⁹⁰.

13.3.10.1 Pension provisions municipal personnel

As mentioned by Suykens (1993) about 90% of the Belgian municipalities cede the insurance risks for municipal personnel to RSZPPO; the other 10% have an internal pension fund or cede the risks to an independent insurance company²⁹¹.

These percentages can fairly well be confirmed by the empirical findings based on Question II-1 of the questionnaire and on the annual accounts 31st December 1995 as shown in table 13.21.

²⁸⁷ Law 8th December 1976; RD 1st June 1977.

²⁸⁸ Being governmental authorities, municipalities are not obliged to cede the pension insurance risks to an agreed insurer, mutual or pension fund, as is the case for private enterprises.

²⁸⁹ The insurance companies are strictly regulated by national control legislation based on European Directives (Law of 9th July 1975 concerning the control of insurance companies; RD of 22th February 1991 containing the general regulations regarding the control of insurance companies).

²⁹⁰ The pension funds are strictly regulated by the same law applicable for insurance companies (Law 9th July 1975 concerning the control of insurance companies) and by the RD 14th May 1985 containing the application of the control law on autonomous pension funds; RD 15th May 1985 concerning the activities of autonomous pension funds.

²⁹¹ This company is mainly OMOB = "Onderlinge Maatschappij voor Openbare Besturen".

Table 13.21: Frequencies pension plan systems

Pension funding	Municipal personnel	Mayor and Aldermen
Solely external		
RSZPPO	83	0
OMOB	2	0
RSZPPO + Insurance cy	4	0
	92.7%	0%
Solely internal	0	96
Combination external and internal:		
RSZPPO + internal	4	0
RSZPPO + OMOB + internal	3	0
	7.3%	100%
	-----	-----
	96 100%	96 100%
Data N/A	4	4
Total	100	100

Apparently, all considered municipalities cede the pension insurance for the municipal personnel at least partly to RSZPPO.

For the majority (92.7%) of municipalities being insured externally, there is no need for recording pension provisions. Indeed, the external insurers are responsible for the financing and payment of the coming pension payments based on the earlier contributions of the municipality. Although it does not influence their financial position, none of these municipalities discloses any comment regarding their pension system and more particularly regarding the kind of relationship between RSZPPO and the external insurer, which disables the transparency and could be called a shortcoming in the reporting.

A crucial finding is that the 7 municipalities²⁹² combining

²⁹² These municipalities are mainly the big ones: in cat. 1: the only 1; in cat. 2: 2 of the 3; in cat. 3: 1 of the 8; in cat. 4: 3 of the 10 and none of the categories 5, 6, 7 and 8.

internal and external pension financing have not disclosed any pension provision at all in their balance sheet whereas they are at least partly pension insurer themselves. Even in the Notes they do not disclose information about the applied pension plan and about their pension insurance programme either (who insures what and how?; which part is externally insured and which part internally?).

The importance of the lack of disclosing pension provisions in the 7 mentioned municipalities, could be demonstrated by referring to an article in an established newspaper (Het Nieuwsblad 3/1997):

In a certain municipality²⁹³ not belonging to the sample of the study, but approached in a previous study (Christiaens 1996a, Christiaens 1996b), the total assets are 7.2 bio. BEF. This municipality would have a non-disclosed pension obligation of 6.5 bio. BEF.

Of the 7 mentioned municipalities there is at least one other municipality not disclosing any pension provision but having a factual pension fund managed by an insurance company²⁹⁴. This pension fund is supposed to be in an actuarial balance, which implies a sound intergenerational equity, but these figures are not recorded nor disclosed in the municipal annual accounts.

Due to the non-disclosure of information in the annual accounts the consequences of the lack of pension provisions are very difficult to assess in the municipalities having pension obligations. Anyway, the importance of pension provisions is growing due to the strong increase of the ageing

²⁹³ The problem of the insufficient internal pension financing has already been put in the forefront in an interview with one of the Aldermen of an important municipality on 20th March 1996 and in the newspaper (Het Nieuwsblad 14-15th September 1996, p. 14).

²⁹⁴ The interviewee was a Municipal Treasurer of a quite large municipality.

population and to the so-called "perekwatie"²⁹⁵.

Furthermore, no information is provided about the intergenerational equity²⁹⁶. In other words which generation is paying for whose pensions is not clarified. Dioguardi (AH 1995, p. 63) complains about cash accounting which ignores governmental obligations to spend in the future. Against such an "out of sight, out of mind" motto he prefers accrual accounting²⁹⁷. Apparently, regarding pension provisions the safety belt accrual accounting has not come into action in Flanders.

An important generalised conclusion is that the watchdog function of accrual accounting depends on its correct and followed-up implementation, which can be put forward as a *conditio sine qua non* in accounting reform.

A possible explanation for not disclosing pension provisions could be the fact that governments are used to financing pensions by means of a repartition system. This point of view is dealt with in the next section.

A number of municipalities not disclosing pension provisions is trying to transfer the pension obligations to external professional insurers such as OMOB. However, it remains unclear to what extent the insurance risks and obligation are taken over.

²⁹⁵ "Perekwatie" is a modification (almost always an increase) of the pension payment due to a renewed collective agreement on conditions of employment.

²⁹⁶ This item being an important objective is put forward by certain regulating bodies like CICA (1985) and GASB (1987).

²⁹⁷ "With rigorous accrual accounting principles we are forced to face the true financial facts now, instead of enduring sudden and ugly surprises, including bailouts, later." (Dioguardi AH 1995, p. 63).

13.3.10.2 Pension provisions for Mayor and Aldermen

For the Mayor and Aldermen all municipalities act themselves as a pension insurer themselves (see Table 13.21).

This means that in fact the municipalities should have accounted for pension provisions as liabilities, which appears not to be the case. Even in the Notes there is no calculation whatsoever nor is any comment included in any of the annual accounts. The remarks are similar as for the non-disclosure of the pension provisions for the municipal personnel above, be it that the amounts are less spectacular.

The technical aspect is that each municipality just records the payment of the pension in the G/L combined with the adequate registration in the budgetary account. Each of the 95 considered municipalities has applied this G/L account 62600 *Pension Payments directly at the Municipality's expense*, which is conform with NARGC. The level of payments is approximately related to the size of the municipality.

Looking at traditional governmental *repartition systems*²⁹⁸, the actual outcomes for the pension provisions of Mayor and Aldermen as well as for municipal personnel (i.e. no disclosure of provisions) might be approved of. However, derived from business accounting with its "true and fair view", NARGC aims at showing a more complete, objective view of assets and liabilities (*Report to the King concerning RD 2nd Aug. 1990*). Furthermore, according to NARGC rights and commitments have to be disclosed in the Notes (*MD 23th September 1991*) and different authors stress the principle of completeness²⁹⁹.

This prevailing point of view actually imposes a capitalisation system in which future pension payments are

²⁹⁸ A repartition system is an actuarial pension plan in which contributions are supposed to be equivalent to finance payments in the same year and thus provisions are not set up ("pay as you go").

²⁹⁹ Martens, Umans & Blomme 1992, p. I-66, II-2.

actuarially discounted and disclosed as provisions, which is in conformity with GAAP.

To provide an impression of the monetary importance just for Mayor and Aldermen, a very simplified actuarial approximation of the unrecorded provisions is enclosed in Appendix X.

13.3.11 Provisions for risks and charges: other provisions

In general the accounting regulations concerning provisions seem to be unsatisfactory and mistaken³⁰⁰. In the sample there is just 1 municipality which has recorded provisions, be it imprecisely and for a small amount (i.e. 1.2 mio BEF) and without showing a fair comment of the contents either.

The first balance sheet and the annual accounts 1995 were all screened on their disclosure of **valuation rules regarding provisions** for risks and charges. The findings are categorised and exhaustively shown in Appendix XI. A summary of the frequencies of the disclosure practices is presented in table 13.22.

Taking into account the empirical findings, some noteworthy remarks can be formulated:

- Firstly, the importance of the item provisions seems to be underestimated. As presented in table I.21 the item is very often completely left out of the valuation rules disclosed in the Notes, which seems to prove the lack of perceived importance. Another proof is the description of the provisions in the valuation rules:

- * as being insufficiently relevant (e.g. Euraccounts 1st Jan. 1995; ad hoc 1a 1st Jan. 1995);

- * or with an excuse of being not (yet) applicable (e.g. VB Consultants 1st Jan. 1995; ad hoc 1b 31st Dec. 1995).

- A second remark is that provisions are presented as if they were a possibility rather than a necessity. In their valuation rules the majority of the municipalities describe the provisions as being "possible", not "necessary if existing". They literally use the word "**can**" and not "**will**" (e.g. Moores & Rowland 1st Jan. 1995, 31st Dec. 1995; Ad hoc 1a 1st Jan. 1995; Ad hoc 2b 31st Dec. 1995). Just one disclosure practice

³⁰⁰ See also Chapter 12, 12.1 SUPREMACY OF THE TRADITIONAL BUDGETARY ACCOUNTING SYSTEM.

is somewhat acceptable but incomplete (i.e. Ad hoc 2a 1st Jan. 1995).

Table 13.22: Municipalities disclosing valuation rules regarding provisions³⁰¹

Disclosing practices	First balance sheet 1st Jan. 1995		Annual accounts 31st Dec. 1995	
Euraccounts	18		0	
Mod. Euraccounts ^a	1		0	
Moore & Rowland	18		14	
Mod. Moore & Rowland	2		1	
VB Consultants	3		0	
Ad hoc ^b	3		2	
No disclosure	43	48.9%	77	81.9%
	88	100%	94	100%
Data N/A	12		6	
Total	100		100	

^a Mod. Euraccounts means that the municipality uses the same model as the Euraccounts-municipalities without being related to Euraccounts.

^b Ad hoc means that each municipality has written its own model.

- Thirdly, as is mentioned above, the aspect "future" seems to be misunderstood by both regulations and practice: the activity leading to a provision and the subsequent payments are both seen in the future, which is not correct (e.g. Moore & Rowland 1st Jan. 1995: "risks and charges that will occur in the future", Ad hoc 2b 31st Dec. 1995). According to the patrimonial view which is aimed at, the activity should have been charged in the current year itself irrespective of the outcomes which are going to happen in the coming year(s).

- Fourthly, comparing the annual accounts 1995 with the first balance sheet reveals a strong decrease in the disclosure of valuation rules regarding provisions. This seems to be a reason to believe that the valuation rules are considered

³⁰¹ The fact that a municipality has applied the model of a certain consultant regarding provisions does not imply that its valuation rules are completely similar.

important just once in the first drawing up. Apparently, the underlying function and the information value as well as the accountability aspect of the valuation rules accompanying the annual accounts does not get enough attention.

OCMW-hospitals

An important example of the necessity of disclosing provisions is the **deficit of OCMW-hospitals** for which the municipalities are liable. Since there is a systematic time-lag of a couple of years until the exact amounts of the deficits are acknowledged and notified officially by the Ministry of Public Health, it is necessary to record provisions in a patrimonial accounting system. This kind of obligation with an uncertain level of the amount should be recorded as provisions for risks and charges (Redant 1995, p. 81).

Not every municipality disposes of an OCMW-hospital, but there is still an important factor left out so far. In general deficits of OCMWs are at the expense of the corresponding municipality. This implies that possible shortages in the pension financing of OCMW personnel leading to a deficit, will also be claimed on municipalities. This increases the need for adequate pension provisions.

As commented in the Chapter 8: Investigation questions, an additional test to check the validity of the reponses on Question II-2 was the looking up of the budget-article 872/435-02 *Contributions in deficits of hospitals* and its linked G/L account 63618 *Contributions in the deficits of public hospitals*. However, this method of reviewing the respondent's answer has not been succesful since almost none of the municipalities having an OCMW-hospital has classified the deficits in the appropriate G/L account 63618.

The outcomes in the empirical study based on Question II-2 of

the questionnaire and on the annual accounts are as follows:

Table 13.23: Frequencies relationship OCMW-hospitals

Relationship OCMW-hospital	Number of municipalities
No OCMW-hospital	86
Yes OCMW-hospital:	
- not having deficits	3
- deficit recorded when paid	7
- deficit recorded as a provision	0
- deficit recorded as a debt	1
Data N/A	3
Total	100

The examination reveals that no municipality has recorded any OCMW-deficit as a provision. There is even no comment nor clarification on this subject in the Notes. The municipalities are not even disclosing whether or not they have an OCMW-hospital running to a deficit.

Conclusions

The balance sheet item Provisions for risks and charges appears to be misunderstood and its function is underestimated.

Except for one very small amount no municipality recorded the estimated impact of litigations, claims, ..., which disturbs the completeness and correctness of the patrimonial view.

For the Dutch annual accounts 1985 Volmer's study indicates that 16 of the 25 municipalities were disclosing provisions (Volmer 1992, p. 224).

13.3.12 Accruals and deferrals

13.3.12.1 Use of "pure" accruals/deferrals

Focusing on just the accounts covering accrued charges, accrued income, deferred charges and deferred income, the following practices are adopted by the 95 municipalities.

Table 13.24: Frequencies accruals and deferrals

Practices of Accruals and Deferrals	Recorded	%
4901 <i>Deferred charges</i>	12	12.6
4903 <i>Deferred income</i>	24	25.3
4902 <i>Accrued charges</i>	3	3.2
4904 <i>Accrued income</i>	5	5.3
490X <i>Pure accruals and deferrals</i>	29	30.5
49600 <i>Payments to identify</i>	38	40.0
49500 <i>Receipts to identify</i>	39	41.1
49501 <i>Receipts registered in the subjournals</i>	4	4.2
49700 <i>Receipts to allocate</i>	34	35.8
49800 <i>Amounts improperly received</i>	58	61.6
49900 <i>Prepayments of interests</i>	21	22.1
49999 <i>Disposal from old budgetary accounting</i>	2	2.1
49XX <i>Suspense accounts</i> ^a	80	84.2
49 <i>Accruals and deferrals</i>	83	87.4

^a Exclusive of the account 49200 *Invoices in suspense for charging* which is going to be discussed in the part of the cut-off beyond.

Taking the four kinds of accruals and deferrals together there are only 29 (i.e. $29/95 = 30.5\%$) of the considered 95 municipalities disclosing at least one kind and a few disclose negative amounts at that. The different levels in value are not taken into account any further.

One could seriously argue that actually every municipality encounters period-costs and -revenues which imply the recording of accruals and deferrals. Therefore, this common

omission of recording implies a lack of measuring and recording the patrimonial view as good as possible. This finding is consistent with the explanatory factors as discussed in the section Chapter 12: Technical, conceptual characteristics.

In a few cases some accounts such as 4901 *Deferred charges* are also used for recording prepaid salaries³⁰² or for prepayments on dividends³⁰³.

It is likely that the accounts 4902 *Accrued charges* and 4904 *Accrued income* should contain the prorata interests on loans of the assets-side and loans of the liabilities-side. By far the majority of these loans are contracts with Gemeentekrediet, who provides each year around year end information per loan including expiry dates, accrued interests, etc. The municipalities are able to adjust their accounts, in particular their P/L account on the basis of this information, which explains the reason why accruals/deferrals need not be recorded anymore. However, municipalities also make contracts with financial service organisations (e.g. leasing companies) without achieving that "handy" year end accounting information. The annual accounts of such municipalities should disclose "pure" accruals/deferrals, which is doubtful thought when looking at the very low frequency and amounts of the accruals.

Rather surprising is the finding that 1 out of the 3 disclosing 4902 *Accrued charges* as well as 3 out of the 5 disclosing 4904 *Accrued income* deal with negative amounts. Apparently a number of municipalities do not care about the correct sign and this finding also seems to indicate that there exists a lack of financial accounting know-how.

³⁰² See 13.3.17 Salaries appointed officials January 1996.

³⁰³ See Chapter 15, 15.3 PREPAYMENTS ON DIVIDENDS.

Looking closer at the municipalities which have recorded the "pure" accruals and deferrals one could wonder whether the experienced municipalities, the municipalities having bookkeepers with business accounting experience at their disposal and the municipalities having called in a professional consultant might give an explanation. These data are summarised in the accompanying table 13.25.

Table 13.25: Explaining factors accruals/deferrals

Attributes	Recorded accruals deferrals	Not- recorded accruals deferrals	Total
Experienced municipalities	4 36%	7 64%	11
Bookkeepers having business experience	11 41%	16 59%	27
Professional consultants ^a	10 28%	26 72%	36
Generally	29 31%	66 69%	95

^a Euraccounts or Moores & Rowland.

The null hypothesis that there is no influence at a significance level of $\alpha = 5\%$ or 10% could not be rejected using a X^2 test (substituted by binomial tests for the case in which d.f. = 1 and the expected $n \leq 5$) (Emory 1980, p. 416). Therefore, these significance tests do not reveal a significant influence on having recorded accruals/ deferrals or not. In other words, the three incentives have no significant effect on the accounting practice of accruals and deferrals.

13.3.12.2 Use of suspense accounts

Generally, the frequencies of the use of the suspense accounts are not persuasive; the highest score (i.e. 58, or 58/95 = 61.1%) is the recording of amounts improperly received.

Similarly as in "pure" accruals and deferrals, some accounts catch the eye due to their negative sign: 3 of the 38 disclosing 49600 *Payments to identify*, 2 of the 39 disclosing 49500 *Receipts to identify*, 1 of the 34 49700 *Receipts to allocate* and 2 of the 58 49800 *Amounts improperly received*. Again some municipalities seem to lose sight of a correct sign.

One of the consequences is that the comparability is somehow damaged. This comparability is also negatively influenced by the apparent heterogeneity in recording and disclosing practices.

Although it seems so in numbers, the municipalities having recorded 49600 *Payments to identify* are not systematically the same as those having recorded 49500 *Receipts to identify*.

In a few cases some of the suspense accounts such as 49600 *Payments to identify* or 49800 *Amounts improperly received* are also used for deferring the non-earned salaries for fixed appointed personnel January 1996 or for deferring the non-earned income of prepayments on dividends³⁰⁴. This kind of application is actually a pure accrual/deferral.

Contrary to the published prescriptions³⁰⁵ in which the account 49700 *Receipts to allocate* is defined for recording subsidies receivable for GESCO's, the empirical findings point out that for this objective the account 49500 *Receipts to*

³⁰⁴ See Chapter 15, 15.3 PREPAYMENTS ON DIVIDENDS.

³⁰⁵ Martens, Umans & Blomme 1992, p. V-84; Guidelines Nuttynck 1996, p.

identify is also applied several times. This incorrect switch is not all that important since the two accounts are similar. But, the question remains why there is no compliance in practice with the 2 identical prescriptions giving no other reason to differ. This finding could be seen as a symptom for the lack of congruence and the lack of harmony. There are still some other examples of misclassification and confusion of suspense accounts.

It is noteworthy to mention that the municipalities having recorded accruals and deferrals are not systematically only the larger municipalities.

Taking all accrual and deferral accounts together there are still 12 (i.e. $12/95 = 12.6\%$) municipalities not recording any accrual/deferral. Since these are not specifically the smaller municipalities, one could argue that at least these 12 are not complying with the accrual/deferral regulations.

In summary, the use of suspense accounts is made rather complex leading to less transparency.

13.3.12.3 Comments in the Notes

Examination of the Notes reveals that the balance sheet item accruals/deferrals is merely commented in 23 municipalities (i.e. $23/94 = 24.5\%$). In 6 municipalities there were no accruals/deferrals to comment on. The other 59 (i.e. $59/94 = 62.8\%$) municipalities have not disclosed comments on the contents of the item. A number of these 59 did provide some information on the level of the account but not any further; the balances of the accrual and deferral accounts were often just copied from trial balance without any additional information or interpretation of their contents.

13.3.12.4 Disclosure of valuation rules

The first balance sheet and the annual accounts 1995 were all screened on their disclosure of **valuation rules regarding accruals/deferrals**. The findings are categorised and exhaustively shown in Appendix XII.

A summary of the frequencies of the disclosure practices is presented in table 13.26.

Looking at the empirical findings, some remarks can be formulated:

- Firstly, comparing the annual accounts as of 31st December 1995 with the first balance sheet reveals a strong decrease (i.e. a non-disclosure of 77.4%) in the disclosure of valuation rules regarding accruals/deferrals. The results and the interpretation are similar as regarding the valuation rules of provisions (see table 13.22).

- Secondly, there appears to be a lack of understanding of the need for accruals and deferrals as well as their concept. The casuistical approach (i.e. just naming the cases of accrual and deferral as such, without any motivation or framework) in describing the valuation rules seems to prove that the actual background and objectives of accruals/deferrals is not well understood (e.g. M&R 1st Jan. 1995, 31st Dec. 1995; Ad hoc 3A, 5A, 7A 1st Jan. 1995; Ad hoc 3B, 6B 31st Dec. 1995).

- Thirdly, there exists in general a confusion between the transitory aspect of accruals/deferrals and the transitory aspect of amounts payable/receivable. In other words: confusing a "juridical suspense" with an "accounting suspense": it is not because the juridical characteristics are in progress that the amounts receivable/payable would not yet be existing.

The accounts accruals and deferrals are seen as the solution to combine the registration of the P/L effect and the aspect of the payment which is going to happen next year. As if

recording costs and creditors simultaneously were not possible. In other words, it is the earning happening in another year, which is the clue, not the payment occurring in another year.

Such a confusion appears in Ad hoc 4A, 5A, 6A liability-side 1st Jan. 1995 and in Ad hoc 6B liability-side 31st Dec. 1995. One can conclude that there is a confusion between the realisation concept and the payment concept. The first actually leads to adjustments of debtors and creditors in the broad sense (*sensu lato*), the latter actually leads to adjustments of accruals/deferrals.

Table 13.26: Municipalities disclosing valuation rules regarding accruals/deferrals³⁰⁶

Disclosed model	First Balance Sheet 1st Jan. 1995		Annual Accounts 31st Dec. 1995	
Euraccounts	18		0	
Mod. Euraccounts ^a	2		0	
Moores & Rowland	17		13	
Mod. Moores & Rowland	2		2	
Ad hoc ^b	7		6	
No disclosure	42	47.7%	72	77.4%
	-----		-----	
	88	100%	93	100%
Data N/A	12		7	
Total	100		100	

^a Mod. Euraccounts means that the municipality uses the same model as the Euraccounts-municipalities without being related to Euraccounts.

^b Ad hoc means that each municipality has written its own model.

- Fourthly, accruals and deferrals are seen as useful accounts to record certain activities in a provisionary way (e.g. Ad hoc 4A 1st Jan. 1995). Again a confusion appears; accruals and deferrals are not intended as provisional accounts. Recording something in a provisional way does not imply the use of a suspense account. There are several balance sheet accounts

³⁰⁶ The fact that a municipality has applied the model of a certain consultant regarding accruals and deferrals does not imply that its valuation rules are completely similar.

being accompanied with subaccounts in order to record the provisional character. Unfortunately, such technical accounting issues providing the use of subaccounts have not been fully and adequately foreseen in the *Chart of accounts*. Indeed the *Chart of Accounts* is restricted to a number of obligatory accounts. Principally there is no place for adaptations or enlargements to subaccounts (Vencken 1995, p. 45).

- *Fifthly*, the contents of disclosing the valuation rules of Euraccounts 1st Jan. 1995, Ad hoc 6A asset-side 1st Jan. 1995 and Ad hoc 4B 31st Dec. 1995 could be called fair enough.

13.3.13 Accruals and deferrals: cut-off problems

It was already mentioned³⁰⁷ that the recognition of costs in financial accounting depends on the decision to charge in the budgetary accounting.

In turn the decision to charge depends on budgetary and financial management³⁰⁸ rather than on the "true and fair view" of the actually incurred costs. Therefore, one should be very careful in assessing the representativeness of the annual accounts for the other days³⁰⁹ of the financial year as well as in comparison to other municipalities.

Concentrating on the purchase cycle of various goods and services, overheads, the accounting procedure is analysed hereafter.

Before charging (b) takes place, incoming invoices have to be recorded as "received" (a) in a neutral balance sheet entry without P/L effect, in suspense for further approval and charging³¹⁰.

Schematically, the treatment in financial accounting is as follows:

³⁰⁷ See Chapter 12, 12.1 SUPREMACY OF THE TRADITIONAL BUDGETARY ACCOUNTING SYSTEM

³⁰⁸ It is well known that a number of municipalities tend to fully spend their remaining budgets at the end of the year by placing (unnecessary) orders (Guidelines Nuttynck 1996, p. 4). As such the costs and the amount of trade creditors are increased more or less artificially. Such municipalities are not easily comparable with others respecting the guidelines of not fully spending their budgets.

The contrary situation is also likely to occur: if the budget is not sufficient anymore, purchases at the end of the year tend to be delayed and recorded in the next year when a new budget becomes available. This practice does not give a really comparable picture either.

Apart from the varying practices in charging year end activities having consequences to P/L, there are also different practices as to the payment policy. Several interviews revealed that at the year end some of the municipalities are doing their best in paying their creditors as much as possible before 31st December 1995 in order to reduce accounting work.

³⁰⁹ This means that the annual accounts provide a unique view on 31st Dec. 1995 which is not representative for the other 364 days of the year.

³¹⁰ However, from the point of view of financial accounting *per se* the amounts could have been entered directly in P/L in spite of their approval for budgetary charging.

charge) is a disturbing factor influencing the financial accounting system. Two important reasons can be invoked:

- The approval does not happen fluently and continuously as normally in business accounting, but more in batch. It is the Municipal Treasurer who will effectuate the "charging", but in case of disapproval (art. 64 NARGC; Vencken 1995, p. 35; Leroy 1995, p. 39) the documents to approve are sent through to the College of Mayor and Aldermen which has its Meetings periodically.

This could create the risk of having invoices ready to be charged, but still waiting for the coming Meeting which might take place after the ultimate date of 15th Febr. 1996. Such invoices will not be taken into account, although the accompanying costs have already been incurred.

- The approval is in the accrual accounting system perceived as if it determines the financial, economic position towards the trade creditor. However, as such the real economic situation is neglected. In other words, it is not because the invoice is not yet approved formalistically, that the cost and the debt would not yet have been incurred.

What matters in an accrual accounting system, is the economic reality and thus invoices should be charged in respect of their being "earned" and not just looking at the formalistic decision to charge. NARGC has not gone in this last direction, without being fully aware of the consequences.

Moreover, defining the cut-off as depending on the timing of the approval is giving the municipality an additional means of creative cut-off management. This implies the "managing" of the annual reports and the influencing of the annual figures.

Below some empirical findings regarding the cut-off are presented.

Table 13.27: Frequencies accruals/deferrals: cut-off

Practices	492	447	440	442
Positive balances	57	57	87	4
Amounts:				
$x \leq 100,000$	6	6	7	-
$100,000 < x \leq 500,000$	6	6	1	1
$500,000 < x \leq 1 \text{ mio}$	6	6	2	-
$1 \text{ mio} < x \leq 5 \text{ mio}$	16	16	18	2
$5 \text{ mio} < x \leq 10 \text{ mio}$	8	8	18	-
$10 \text{ mio} < x \leq 20 \text{ mio}$	11	11	18	1
$20 \text{ mio} < x \leq 50 \text{ mio}$	3	3	16	-
$x > 50 \text{ mio}$	1	1	7	-
Negative balances	2	2	2	0
Zero balances	35	35	5	90
Data N/A	6	6	6	6
Total	100	100	100	100

The findings can be commented as follows:

* All the accounts 492 *Invoices in suspense for charging* are completely in correspondance with the accounts 447 *Invoices to be charged* as prescribed by the regulations. Table 13.27 includes a frequency table of the amounts in order to present an idea of the importance.

* The many zero balances for the account 492, 447 indicate that the practices of recording the cut-off is varying, which will be demonstrated further on.

* The examination reveals a few **negative** balances³¹² considering the accounts in table 13.27. Generally, these negative balances cannot be approved right away and indicate an unusual way of recording or a lack of end of the year adjustments.

* There are different possibilities to explain the 5

³¹² The amounts are (6,201,973) and (33,516) for the accounts 492, 447 and the very small amounts of (4,518) and (2,185) for 440 trade creditors.

municipalities showing no trade creditors. A first possibility is that the municipality has recorded the trade creditors elsewhere, on another account (e.g. 442); this was not the case for the account 442 as one might expect since 440 and 442 have a similar function. Secondly, the municipality could have paid all the creditors as many as possible to avoid too much year end administration and accounting work³¹³ or thirdly the invoices have not been charged as they were supposed to, but are postponed until 1996 by means of the accounts 492-447. A reason for this might be the shortage of budgets. Lastly, a number of invoices could have been prevented from entry in the accounting leading to an understatement of the 492-447 as well as of the cost affecting the annual accounts.

* The use of the account 442 seems to be very poor and not understood.

* The practices of cut-off are not commented in any of the Notes.

* The found differences in recording the accounts 492, 472, 440, 442 suggest that a varying budgetary and financial management at the end of the year exists, thus influencing the annual accounts.

Following table attempts to give a more extensive picture of the current practices mainly based on question II-6 of the questionnaire. The approach is concentrated on the purchase cycle of various goods and services, overheads.

³¹³ This kind of motivation was suggested by some interviewed Municipal Treasurers.

Table 13.28: Frequencies cut-off practices

Criterion	Frequency
a) Invoice date 1995	45
b) Invoice receiving date, charging invoices arrived 1st Jan.- 15th Feb. 1996	12
c) Delivery date 1995	11
d) Other:	27
b.1 Invoice receiving date if goods and services are delivered in 1995	2
b.2 Invoice receiving date if order date is in 1995	3
b.3 Invoice receiving date, charging invoices arrived 1st Jan.- 31st Jan. 1996 and if goods and services are delivered in 1995	1
b.4 Invoice receiving date, charging invoices arrived 1st Jan.- 28th Feb. 1996	1
b.5 Invoice receiving date determines charging date	2
d.1 Order date determines charging date	4
d.2 Order date determines charging date if budget available, otherwise 1996	2
d.3 Date of appropriation of the budget ("vastleggingsdatum") determines charging date	2
d.4 Availability of budget determines cut-off ^a	3
d.5 Invoices dated before last Meeting ^b Mayor and Aldermen 1995 are charged in 1995; all the other invoices are charged in 1996	4
d.6 A combination of rules just like that; no further information	3
Data N/A	5
Total	100

^a One of which explicitly mentions that it does not matter which rule as long as the budget is used up as much as possible.

^b For 1 of these the mentioned date of the last Meeting was 19th December 1995.

The legal cut-off is not clear; the handbooks and the literature refer to GAAP and particularly the principle of matching (Martens, Umans & Blomme 1992, p. I-66, I-67). If GAAP were the standard, the practice c) delivery date would be the most acceptable cut-off rule as it is in business accounting.

Assuming that the time sequence is firstly delivery date, then invoice date and afterwards date of receiving the invoice, most of the practices roughly tend to anticipate the costs. Practices b.5 and d.5 however are seriously delaying the incurred costs until next year. The P/L effect of the practices literally depending on budget availability cannot externally be assessed nor estimated.

The findings of cut-off could be called astonishing. Widely varying accounting practices; underestimation of costs and unrecorded liabilities.

Particularly for The Netherlands Faber & de Jong (1988, p. 36) found that a number of practical misunderstandings existed about the cut-off at year end resulting in varying practices. Subsequent information can be taken into account till 31st March, but this was once interpreted as if flows could be posted till 31st March.

13.3.14 Valuation rules

13.3.14.1 Qualitative characteristics

The frequencies of municipalities disclosing the groups of valuation rules³¹⁴ provides the following information (the data were not available for 6 municipalities):

a) Valuation	62
b) Revaluation	69
c) Depreciation	67
d) Amortisation	56
e) Other	3
f) Detailed per item	16
No disclosure	21

Apart from a few exceptions all municipalities having called in Euraccounts show the first four groups (a, b, c, d); the municipalities having called in Moores & Rowland all show the first four groups as well as the sixth group (a, b, c, d, f). For the other municipalities there is no fixed pattern according to which groups are disclosed.

The fact that 21 municipalities (i.e. $21/94 = 22.3\%$) do not provide any information at all concerning the valuation rules is attracting attention; as a matter of fact the non-disclosure of valuation rules is not in compliance with NARGC and negatively affects the readability.

In order to measure the combination of the different groups the following approach was worked out, whereby group e) and group f) are taken together:

³¹⁴ See Chapter 4, 4.1 EXTENT OF COMPLIANCE.

Number of municipalities showing:

none of the 5 groups	21	22.3%
1 of the 5 groups	6	
2 of the 5 groups	2	
3 of the 5 groups	17	
4 of the 5 groups	32	
all of the 5 groups	16	17.0%
	94	100%
Data N/A	6	

total: 100

Apart from those municipalities not disclosing any rules whatsoever and some disclosing at the most 2 groups, the majority is at least in a formal way in compliance with the aims of NARGC.

13.3.14.2 Quantitative characteristics

Measuring the importance of the disclosure of valuation rules in terms of the length in pages, the following findings appear:

Table 13.29: Frequencies length of valuation rules

Length in pages	Number totally	EUR related	M&R related
0 pages	21	2	-
0 < x <= 1 page	27	19	-
1 < x <= 3 pages	19	-	-
3 < x <= 5 pages	9	-	-
5 < x <= 10 pages	3	-	2
10 < x <= 15 pages	0	-	-
15 < x <= 20 pages	3	-	1
20 < x <= 25 pages	12	-	12
Data N/A	6	-	1
	----- 100	----- 21	----- 16

The average of the number of pages is 4.8 for the 94 considered municipalities. At first sight this figure is actually divided in 2 clusters: a group showing nothing or at most a few pages and another group showing a lot of pages.

The explanation for these clusters and at the same time for the spread of the length is quite obvious. By far the majority of those municipalities having called in Euraccounts are disclosing just 1 page of valuation rules. This one page covering a, b, c, d is very concise and stresses the calculation of the two revaluation indices. This is quite opposite to the municipalities which called in Moores & Rowland, whose valuation rules are very long and take more than 20 pages. Their valuation rules are somehow overburdened. A more synthetic table would have shortened and clarified the valuation rules in a better way.

13.3.14.3 Other findings

* Optional legal rules: Particularly in the valuation rules regarding the first balance sheet, many municipalities describe the valuation rules in their legal form which often contains more than one option (e.g. the valuation of sewers: one could select the price of purchase or construction or a fixed price per meter multiplied by the total length of the sewers).

Unfortunately, in many cases the municipalities fail to select explicitly one of the options and it is not made clear which of the options was applied. This shortcoming keeps the reader of the annual accounts guessing. A more concrete example is as follows:

Concerning the depreciation of fixed assets the tables with the legal rates of depreciation are literally copied from the legislation in a number of municipalities. Some of these rates concern extraordinary maintenance with an optional lifetime of max. 15 years. The problem is that hardly ever the selected lifetime is explicitly mentioned

or appears in the rest of the figures.

* Motivated exceptions on rules: Normally, most valuation rules have to be applied straight. However, by virtue of art. 2 MD 30th October 1990 modified by MD 1st February 1994, an alternative valuation rule is accepted for a number of natures if motivated. Again, it is often unclear what alternative rule exactly has been chosen and the necessary motivation is seldom included.

* Double-sided rules:

The definition of double-sided valuation rules which are not in compliance with the regulations and which are disturbing the usefulness of the annual accounts has already been previously discussed.

* Ambiguous rules:

Analogously, the definition of ambiguous valuation rules was discussed previously. Presumably, this problem of first one rule being chosen, then another is due to irregularities in the editing of the annual accounts and through the use of formalised standard software. Anyway, the confusing rule remains difficult to interpret.

* Unclear rules:

Particularly for those rules regulating the revaluation on immovable fixed assets, the applied amounts to revalue are not clearly defined, not even in the legislation itself. According to certain guidelines (e.g. Guidelines Nuttynck 1996, p. 10), one should take the initial amount 1st January 1995 without incorporating the acquisitions in 1995. But what about the sales, disposals, transfers between assets categories and accounting adjustments in 1995. These kinds of movements in the fixed assets are not dealt with in the revaluation rule. Therefore, they create different practices, which weakens the comparability.

Instead of improving the aimed transparency, these confusing practices result in a poor readability of the annual accounts and this is all the more difficult for persons who are not used to reading annual accounts.

Referring to the 25 examined municipal annual accounts 1985 in the Netherlands, Volmer (1992, p. 225) found that in 18 municipalities the information on valuation rules was non-existent or very poor. In the other 7 municipalities (i.e. 28%) some valuation rules were disclosed, but limited to fixed assets.

Although not really comparable due to a different set-up the empirical study of Faber & de Jong (1988, p. 29) in The Netherlands revealed a weak disclosure of valuation methods: 55% for the disclosure of valuation basis and 3% for the disclosure of the method of depreciation.

13.3.15 Contingencies

Referring to the part concerning provisions for risks and charges where this item has been run into yet, municipalities have to disclose in their Notes **all relevant rights and commitments** which are not included in the balance sheet (MD 23th September 1991). This legal definition is similar as in business accounting.

Reviewing the Notes of the observed 94 municipalities, the disclosure of contingencies and off-balance financing was very poor as shown in following table.

Table 13.30: Frequencies disclosed contingencies per consultant

Practices	BDO, VB	M&R	EUR	No con- sultant	Total
No disclosure	2	4	20	33	59
Limited disclosure	3	11	1	20	35
Full disclosure	0	0	0	0	0
Total	5	15	21	53	94

The disclosure appears to be limited to mortgages, guarantees on assets and certain real guarantees in 35 municipalities (i.e. $35/94 = 37.2\%$)³¹⁵.

Claims, significant litigations, crimes against the environment, guarantees promised for supporting related parties and other commitments, which are all likely to occur in a municipal context, were not well disclosed³¹⁶. No case

³¹⁵ Idem for The Netherlands a few years ago where Faber & de Jong (1988, p. 30) found that only half of the municipalities disclosed merely loan guarantees without any off-balance-financing.

³¹⁶ Certain municipal officials attempt to justify the non-disclosure by warning for the danger that the claiming party could abuse the information provided on an individual level. However, this motivation is too easy. It should certainly be possible to combine the aim of accountability and confidentiality in that the reported information could be made impersonal or unrecognisable.

could be called a full disclosure.

Stronger even, 59 (i.e. $59/94 = 62.8\%$) municipalities disclosed **nothing at all** with regard to rights and commitments.

In respect of the different accounting consultants, there does not seem to be an effect of the consultants in general: the percentages are alike with or without consultants (i.e. 'with' $26/41 = 63.4\%$; 'without' $33/53 = 62.3\%$). It is interesting that the two main consultants have a contrary impact: Moores & Rowland is linked to a limited disclosure whereas Euraccounts is mainly linked to the category of no disclosure of contingencies.

13.3.16 Recognition salaries educational staff

According to art. 72 NARGC the salaries of the educational staff paid by a higher level of government³¹⁷ on behalf of the municipality (as a kind of transfer) have to be recorded as revenue and costs for the same amount³¹⁸.

Looking through the annual accounts the following tests were done:

- Are such salaries being recorded?
- Is the level of revenue equal to the level of costs?

The findings are shown in table 13.31.

Table 13.31: Frequencies equivalence salaries education staff

Practice	Salaries ^a	Subsidies ^b	Comparison
Not recorded	17	17	
Recorded	77	77	
62011=73401			63
62011>73401			5
62011<73401			10
Data N/A	6	6	
Total	100	100	

^a 62011 = Salaries educational staff at expense of a higher level of government

^b 73401 = Subsidies higher level of government for salaries municipal educational staff

17 municipalities have neither recorded the salaries nor the subsidies. It is possible that some municipalities are not qualified for this kind of subsidy. Within the ones which have recorded the flows, 63 (i.e. $63/78 = 80.8\%$) are in compliance with the rule. 15 municipalities (i.e. $(5+10)/78 = 19.2\%$)

³¹⁷ The higher level of government is the Ministry of the Flemish Community (Verbeken 1995, p. 149).

³¹⁸ See Guidelines Nuttynck 1996, p. 2 and Martens, Umans & Blomme 1992, p. V-10-V-12.

apply the rule incorrectly. One municipality disclosing the salaries without subsidies and another disclosing the subsidies without salaries explains the difference between the figures 77 and 78.

An explanation for the differences seems obvious: for a certain municipality some subsidies for student transport services were entered on the account 73401 instead of on the correct account 73403. It seems likely that in general misclassification is the major cause.

Making sure that the amounts are in correspondance could be called a rather easy internal check, which apparently has not been sufficiently worked out.

13.3.17 Salaries appointed officials January 1996

Municipalities have to pay the salaries of the fixed appointed officials in advance each month. This implies that the salaries of January 1996 should have been paid at the end of December 1995. One should expect that the journal entries would be as follows³¹⁹:

Payment at the end of December 1995:

62xxx Salaries officials Dt

@ 55000 Cash at bank and in hand Ct

Deferral to 1996:

49xxx Deferred charges Dt

@ 62xxx Salaries officials Ct

The answers of question II-7 of the questionnaire combined with the data from the annual accounts are summarized in table 13.32.

The majority (i.e. 76%) has chosen for delaying the payments due until the beginning of January 1996 in order to avoid the problem of accruals and deferrals. This "handy" decision seems to provide a solution but it creates an unrecorded liability.

Accounting practice b) is actually the correct one.

Accounting practice d) is not in compliance with the regulations, nor with generally accepted accounting principles. Moreover, the postings of the deferred charges on the accounts 45500 and 48100 have all led to a negative disclosure³²⁰ of the balance sheet item.

³¹⁹ The particular social contributions and taxation are left out to simplify the example.

³²⁰ See also 13.3.8 Classification and compensation.

Table 13.32: Frequencies accounting practices salaries January 1996

Accounting practice	Frequencies
Payment postponed till the beginning of Jan. 1996	76
a) Charged in 1995 when paid, without deferral to 1996	1
b) Charged in 1995 when paid, but deferred to 1996 using deferral accounts:	11
49010 <i>Deferred charges</i>	6
49600 <i>Payments to identify</i>	5
c) Charged in 1995 when paid, but deferred to 1996 using debt accounts	0
d) Other accounting practice:	8
45500 <i>Net salaries payable</i>	4
48100 <i>Third parties</i>	1
Not traceable	3
Data not available	4
Total	100

In most of the Notes of the annual accounts there is a lack of disclosing the valuation rules or the chosen accounting practice in respect of the salaries Jan. 1996. It is quite clear that these differing practices decrease the harmony in accounting disclosures, all the more since the kind of payment practice is not announced in the Notes.

Closer examination in accounting practice b) reveals that 4 of the 11 (i.e. 36.4%) are experienced municipalities. Since their general share is $11/100 = 11\%$ the experienced municipalities seem to adopt the correct accounting practice better than the others.

But, looking at the generally poor frequency of b) it is remarkable that they have not been able to convince the other municipalities in taking over the correct accounting practice b).

13.3.18 Revaluation of immovable assets

13.3.18.1 Legal rule

According to art. 21 NARGC the specified³²¹ immovable fixed assets have to be unconditionally revaluated yearly. Although they are also immovable some natures are legally excepted such as 207 Trees, 232 Metalling of the roads, ... (Verbeken 1995, p. 54).

For the buildings the revaluation is based on the ABEX-index derived from the Belgian construction industry (art. 4 MD 30th October 1990 modified by MD 1st February 1994). This index is published periodically and is the same for every Belgian municipality; for 1995 the index is 1.310 (Guidelines Nuttynck 1996, p. 10).

Regarding the categories of land, a price index based on the municipal taxation rate for real estate (i.e. "Opcentiem")³²² is applied (art. 4 MD 30th October 1990 modified by MD 1st February 1994). Since this index is defined individually, each municipality applies its own index.

13.3.18.2 Practical elaboration

For the practical elaboration of the revaluation rule the Circular Letter Nuttynck 1996, p. 10 provides the following guidelines.

Formula for the revaluation of buildings:

$\text{Revaluation} = \frac{\text{Net book value} * (\text{ABEX 31st Dec. 1995} - \text{ABEX 1st Jan. 1995})}{\text{ABEX 1st Jan. 1995}}$

³²¹ See Appendix XIII. List of natures to revalue.

³²² Further abbreviated as Opc.

or,

$$\text{Revaluation} = \text{Net book value} * 0.01310$$

formula for the revaluation of land:

$\text{Revaluation} = \text{Net book value} * \frac{\text{Value Opc 95} - \text{Value Opc 94}}{\text{Value Opc 94}}$
--

Thus, the basis for revaluation is the net book value at the end of the previous year³²³ or in other words:

$\begin{aligned} &\text{Initial value at the end of the previous year} \\ &+ \text{Revaluations at the end of the previous year} \\ &- \text{Depreciations at the end of the previous year} \\ &\text{-----} \\ &= \text{Net book value at the end of the previous year} \end{aligned}$

The extraordinary maintenance for buildings and land which is recorded on the same G/L accounts as the considered immovable assets is to be excluded from the basis to revalue since this maintenance was legally prevented from being inventoried in the first drawing up 1st Jan. 1995. Although not clearly captured in NARGC, this maintenance has to be separated and should also be deducted from the revaluation basis in the coming years. Moreover, this was done by most of the experienced municipalities which have started before 1995.

This unclear rule must have seemed obvious for the standard setters since it is not further commented in the Guidelines Nuttynck 1996.

The guidelines explicitly mention that the acquisitions in the current year 1995 shall not be included in the basis for

³²³ i.e. 1st January 1995.

revaluation (Guidelines Nuttynck 1996, p. 10).

On the other hand the guidelines have lost sight of the treatment of sales and disposals and of transfers from one heading to another in the current year. Analogously as for excluding the achievement of land and buildings in the current year this study supposes the exclusion out of the basis for revaluation. Moreover, this point of view is in line with the definition of the basis as the net book value as of 1st Jan. 1995.

Regarding the question whether the calculation of the depreciation or the calculation of the revaluation comes first, the guidelines (Guidelines Nuttynck 1996, p. 10) clearly indicate: first revaluation, then depreciation according to the following formula:

$$\text{Depreciation} = \text{NBV} * \frac{1}{\text{Number of years still to depreciate}}$$

NBV = Net book value 31st Dec. 1995 after revaluation.

13.3.18.3 Approach of examination

The conducted examination³²⁴ of the revaluation practices consisted of the following approach:

1/ Based on the fixed assets movements schedule the net book values less Extraordinary Maintenance as of 1st Jan. 1995 were selected.

2/ Using the applicable indices (i.e. general ABEX index and individual Opc index) the revaluation was recalculated and compared with the revaluation as disclosed in the schedule. To avoid the impact of round

³²⁴ See Appendix XIV. Working paper revaluation.

off errors, differences $\leq 0.2\%$ were viewed as an acceptable result.

3/ The unacceptable differences, called "check differences" were further analysed and an explanation was looked for.

4/ Lastly, the total revaluation effect as demonstrated in the fixed assets movements schedule was reconciled with the recorded amount on the G/L account 76120 *Revaluation surpluses on immovable assets due to yearly revaluation*. These two amounts had to be exactly the same. Differences are called "account differences".

Not every municipality in the sample has disclosed a usable fixed assets movements schedule. Therefore, the number of examined municipalities is limited to 67 and the results of this approach are not further used in the study.

13.3.18.4 Empirical findings

a) "Check differences"

Examining the "check differences" reveals that 39 of the 67 examined municipalities **are not in compliance** with the regulations (i.e. 58.2%) although the monetary importance of the differences is limited. For these 39 the median error rate³²⁵ 2.7% with a minimum of 0.3%³²⁶ and a maximum of

³²⁵ The "check difference" is measured in terms of percentage defined as the absolute value of:

$$\frac{\text{checked revaluation} - \text{registered revaluation in schedule}}{\text{registered revaluation in schedule}} * 100$$

³²⁶ Municipalities showing an error rate of less than 0.3% were categorised as being in compliance.

52.8%³²⁷.

The reasons behind the "check differences" can be more than one, depending on the kinds of natures which have been revaluated. The totally 56 reasons for the 39 mistaking municipalities are summarised below:

Table 13.33: Frequency reasons "check differences" revaluation

Difference reasons	Number of municipalities
Movements wrongly included in the basis of revaluation:	
* Acquisitions 1995	7
* Sales and disposals 1995	15
* Transfers ^a 1995	8
Miscellaneous	4
Unexplainable	22
Total	56

^a The examination reveals that the tranfers in the fixed assets movements schedule do not match systematically from one heading to another. The item "tranfers" is mostly used for registrating other kinds of adjustments.

Just in 2 municipalities the tranfers could be matched in that the positive error could directly be combined with the negative error. Since no difference occurred taking them simultaneously, these two municipalities were considered as having fulfilled the revaluation requirements and they are not part of the 39 mistaking municipalities.

b) "Account differences"

Of the 67 examined there are 9 municipalities having an account difference which means that the recorded revaluation in the fixed assets movements schedule does not correspond with the recorded revaluation in the G/L account 76120.

All these 9 belong to the group of the 39 having "check differences". The account differences are very small (max.

³²⁷ This maximum which is an outlier can easily be explained by the not having revaluated the buildings.

2.6%) and there are positives as well as negatives. Except for 1 municipality³²⁸ these differences could not be explained or reconciled.

c) Index rates

Instead of the same ABEX index for all, the indices for land were all different. The average rate was 3.054% with a standard deviation of 2.129%. Just 2 outliers of 12.0% and 13.5% occurred and 1 negative of -0.95%. It is obvious that the two former lead to an enormous increase in the value of fixed assets, as a result of which the P/L account shows an important profit which is actually not really earned.

d) Relationship with some general characteristics

It is likely to suppose that the kind of software supporting the accounting system might be associated with the occurrence of errors or not.

The following table presents the results in respect of the kind of softwarehouse the municipality is related to.

Table 13.34: Frequency revaluation compliance - softwarehouses

Softwarehouse	In compliance		Not in compliance		Total
CEVI	10	7.1	7	9.9	17
Schaubroeck	5	6.3	10	8.7	15
CIPAL	5	7.5	13	10.5	18
Others	8	7.1	9	9.9	17
Total	28		39		67

³²⁸ A certain amount was correctly recorded in the G/L but forgotten in the schedule.

To the right from the observed number of cases the expected number is edited being the total of the observed row multiplied with the total of the observed column and divided by the general total.

Although at first sight the municipalities using CEVI-software seem to be better off and Schaubroeck and CIPAL accordingly worse, the X^2 -test does not provide a significant relationship: the calculated X^2 is 4.1 whereas the critical value is 7.82 or 6.25 for an alfa of respectively 5% and 10%.

A similar insignificance is revealed when the factor professional accounting consultant is selected. Contrary to the category Moores & Rowland and the category no professional consultant, the municipalities having called in Euraccounts are seemingly have less cases of errors. However, the significance is insufficient to reject the null hypothesis: the calculated X^2 is 2.75 whereas the critical value is 5.99 for alfa = 5% or 4.60 for alfa is 10%.

A binomial test was performed since the frequencies of the factor experienced municipality were too low for a X^2 -test. It is interesting to find that the fact whether or not a municipality is experienced is not an explaining factor for having revaluation differences either. This last finding demonstrates that the phenomenon of not being in conformity with the revaluation regulations is not typical for the first year of implementing the new accounting system.

13.3.19 Mechanical accuracy

13.3.19.1 Elaborated tests

As announced in Chapter 4: Concepts and constructs, the analysis of the mechanical accuracy is worked out by means of 10 dichotomous tests. Being in compliance with these accuracy tests does not imply a perfect mechanical accuracy since these tests cannot cover all the aspects which could go wrong. Moreover, these tests are merely checking the coherence, not the contents of certain items. On the other hand each error indicates a shortcoming in the compliance with accounting regulations.

13.3.19.2 Findings

The tests conducted on 94 municipalities reveal the level of compliance as shown in table 13.35.

Table 13.35: Compliance levels of mechanical accuracy

Item	Code	Compliance %
Reconciliation of the results	RECRESU	94.7
Reconciliation of the reserves	RECRESE	87.2
Investment subsidies ^a	INVAMOC	97.9
Cumulated amortisations ^b	AMOINVC	100
Promised subsidies ^c	SUBPROM	96.8
Redemption of loans 64=765	64=765	88.3
Redemption of loans written out 665=74	665=74	90.4
Invoices in suspense ^d	492=447	100
Subsidies 270/274	270_4>= 1714	98.9
Loans agreed 275	275>= 172	95.7

^a The sum of cumulated amortisations may not exceed the capital amount of subsidies.

^b The sum of the cumulated amortisations at the end of the year over the different items of investment subsidies have to exceed the current amortisation in the P/L account

^c These disclosed promised subsidies must not exceed the (obtained) investment subsidies in capital of a higher government or of other governmental

- institutions
- ^d The invoices in suspense of being charged should equal the balance of the according accruals/deferrals, or $49200 = 44700$

Apart from a number of unexplainable errors, the major causes of the disparities are:

- a) the non-disclosure of an appropriation accountant or accounting adjustments without respecting the necessary reconcialition (RECRESE, RECRESU);
- b) Misclassifications (INVAMOCI, SUBPROM);
- c) Asymmetric cut-off errors: this means that certain transactions (e.g. redemptions) are recorded in one of the two accounts (e.g. I.E. 64 Redemption of loans), but not in the corresponding account (e.g. IV'C' 765 Adjustment redemption of loans).

Item per item the errors seem to be very limited. When summarising the findings, the following figures appear:

Table 13.36: Summary mechanical accuracy

Errors	Nr muni- cipaliti es	%	Nr ex- perienced munici- palities	%	Nr pro- fessional consul- tants	%
Not	55	58.5	6	54.5	29	80.6
Once	30	31.9	2	18.2	7	19.4
Twice	9	9.6	3	27.3	0	0
Total	94	100	11	100	36	100

13.3.19.3 Conclusions

There appears to be a weak technical accounting know-how and internal review of necessary reconciliations. The highest rate of problems occurs in the reconciliation formulas testing a consistent cut-off, which confirms the aforementioned problems regarding cut-off.

Among the municipalities dealing with mechanical accuracy errors, the experienced municipalities are also well represented as shown in table 13.36. Therefore, taking the experienced as an example, one could argue that the mechanical accuracy is not going to be automatically improved after a few years.

On the other hand, municipalities having called in a professional accounting consultant (Moore & Rowland; Euraccounts) are performing significantly (X^2 tests significant at $\alpha = 0.001$) better on the mechanical accuracy items.

13.4 OPEN-ENDED COMMENTS QUESTIONNAIRE

There are totally 67 remarks resulting from 32 responses in which the open-ended question was filled in.

Except for a few positive points the majority of the comments are dislikes and the signalling of problems. The main issues are the following, preceded by the frequency of occurrence.

(-) indicates disadvantages, problems, dislikes; (+) indicates likes.

* (+) Need for automation

- 1 Automation had to be worked out at last; the accounting reform was an important incentive

* (+) Likes of the usefulness new accrual accounting system

- 1 Necessary to present a financial view

* (-) Software difficulties

- 2 Software not smooth enough, problems, too complex
- 1 Too many errors allowed in the link Budgetary accounting - Financial accounting
- 1 Softwarehouse too late, low capacity, not satisfactory
- 1 Software-hardware problems
- 1 No satisfactory link between financial accounting system and inventory

6

* (-) Education, training shortcomings

- 4 Lack of training
- 1 Shortage of adequate manuals

5

* (-) Concept new financial accounting system

- 3 The compulsory link between Budgetary accounting and Financial accounting is a conflicting situation, causes problems and is not relevant
- 2 Unnecessary setting up of a new system whereas

software supporting management (e.g. inventorying property) already exists ("inventing the warm water")

- 1 Presumable lack of accounting research in previous years
- 1 Budgetary accounting is going on the whole year whereas financial accounting just takes place at the end of the year: consequently, management is based on the budgetary accounting systems, not on the financial accounting system
- 1 Fixed assets should have been limited to "private" assets leaving out "public" assets
- 1 The financial accounting system is made very dependent on the willingness of other departments, not vice versa

9

* (-) Dislikes of the usefulness of the new accrual accounting system

- 10 Mandated officials are not interested in the financial accounting output: too complicated, too many pages³²⁹
- 3 No added value of the new accounting output
- 3 Demand for more education in respect of the use of the annual accounts
- 2 Transparency towards mandated officials is not gained, on the contrary
- 2 Accounting system is too expensive in return for a limited efficiency
- 2 Accounting system is time consuming and time pressure causes errors
- 1 Lack of uniformity in reporting
- 1 The three kinds of results in the P/L account are too complex to understand
- 1 Unreasonable view of the wealth of the municipality due to the huge acreage whereas the municipality is actually poor
- 1 Depreciations on fixed assets disturb financial view

³²⁹ One of the responding Municipal Treasurers claimed that even a mandated official who is as tax consultant related with business accounting, was not interested in the municipal annual accounts.

- 1 The timeliness of the accounting output is negatively influenced by the last payment of the Ministry which has to be waited for before recording

27

* (-) Instructions, regulations

- 2 Regulations and guidelines were sent too late, implying problems in timeliness
- 2 Weak instructions concerning the accounting treatment of NFPOs and intermunicipal organisations
- 1 First balance sheet caused too much work
- 1 Valuation of public assets in light of regulations is very difficult
- 1 Lack of adequate instructions concerning Notes
- 1 Lack of comparable valuation rules
- 1 Suggestions for improvement regarding link budgetary financial accounting, accounts receivable

9

* (-) Assistance

- 3 Lack of collaboration between the accounting department and the "technical" departments
- 2 Lack of accounting staff, external accounting support necessary
- 2 Performance and support of the Provinces is very weak
- 1 Gap of understanding between mandated officials and accounting staff

8

* (-) Audit

- 1 Audit by the Oversight Bodies is very legalistic³³⁰

³³⁰ An interviewee mentioned the example of an auditor searching to justify an paid amount of 4,200 BEF irrespective of the efforts and the being worthwhile.

13.5 CONCLUSIONS REGARDING RQ1 AND RQ2

All the empirical findings regarding the adoption and implementation of the accounting reform indicate that Flemish municipalities have not complied with a relevant number of issues, which confirms the aforementioned hypothesis H_{10} .

There are indeed a number of problems of non-compliance and differences with accounting regulations in the factual accounting practices, which supports hypothesis H_{20} .

The major areas of non-compliance can be summarised as follows more or less in order of the structure of the annual accounts.

The timeliness of the implementation is not in correspondence with the legislation, but could be called reasonable anyway. The experienced municipalities are significantly more prompt in publishing the annual accounts, which implies that an improvement in timeliness in the coming years can be seems obtainable.

A lot of problems have occurred in the area of the fixed assets:

- omissions for different reasons;
- boundary problems: controversial ownership,
- inconsistencies;
- misclassifications;
- mostly arbitrary choice of valuation rules: the basic legal rule is most of the time got round without any motivation, which suggests a kind of "valuation-disclosure management";
- a enormous diversification of applied unit prices and valuations;
- a variety of fixed assets movements schedules, of which the schedules developed by the two professional consultants can be called correct and adequate;
- a lack of adequate comments in the Notes;

The compliance in the area of stocks, provisions for risks and charges and contingencies is extremely poor, which implies important shortcomings, although the causes could be attributed to the weak and confusing regulations instead of to the implementation. Perhaps misconceptions, fear for the unknown and a kind of "disclosure management" could also be an explanation.

More or less similar are the weaknesses in the area of accruals/deferrals. Possible explanatory factors could be the lack of accrual accounting know-how, the confusing and disagreeing use of suspense accounts and most of all the prevalence of budgetary accounting principles which are in conflict with accruals/deferrals principles and which were not well treated in the accounting legislation.

Checking the issues classification and compensation the accounting practices are characterised by mistakes and errors, albeit for only a limited number of municipalities. Very roughly a general indicator could be 20% of the municipalities.

The area of cut-off encounters huge problems; there appear to be a lot of misunderstandings, confusion, probably due to a lack of correct adequate regulations which should be more in harmony with budgetary accounting. The cut-off problems mainly cover amounts receivable and amounts payable, accruals/deferrals as well as their respective repercussions in P/L.

Although they could have been more strictly and well regulated, the revaluation practices on immovable assets reveal an unnecessary divergence and different calculation problems. In a few cases these problems are caused by the software system.

The valuation rules in the Notes are very diversified, difficult to interpret and to use. Moreover, there are many ambiguous, double-sided and missing rules and the disclosed

rules are seldom in proportion to their actual importance. The trial balance is frequently missing and does not seem to be well understood. Details of balance sheet items are fairly well disclosed, but those of P/L account seldom are.

The disclosed financial analyses, ratios and graphs are strongly varying: some do not show anything; others, mainly municipalities which have called in consultants, exaggerate their disclosure. Anyway, the approaches all remain very business-like and seem copied without reaching typical governmental issues.

Although the Municipal Treasurers were very willing to assist in the present study, the annual accounts are in general not easily obtainable and there are just a very limited number of copies available.

Lastly, it should be noticed that for most issues the experienced municipalities are not performing significantly better than the other municipalities which have started in 1995. This conclusion undermines the idea that after a few years everything will automatically fall into place and that problems will be resolved without having worrying about it now.

Chapt. 14 Explanation of cross-sectional differences

14.1 DESCRIPTIVE ANALYSIS

A preliminary univariate analysis of the independent variables was conducted. The "response profile" is shown in table 14.1.

Table 14.1: Descriptive statistics for the dependent and independent variables

Variables	Mean	Std Dev.	Min.	Max.
<u>Dependent variable</u>				
<i>Compliance index</i> ^a	41.527 62.0%	6.843 10.2%	24.200 36.1%	55.900 83.4%
<u>Independent variables</u>				
Experience <i>EXPERI</i>	0.117	0.323	0	1
Accounting and auditing relationships <i>ORMNFPO</i>	0.372	0.486	0	1
<i>CONSU</i>	0.383	0.489	0	1
Engagement <i>GEWONTV</i>	0.202	0.404	0	1
Professionalism accounting staff <i>STAFF</i>	0.758	0.475	0	2
<i>PROVSTAFF</i>	0.385	0.314	0	1
<i>BIB</i>	0.021	0.145	0	1
<i>EXBUSDICH</i>	0.277	0.450	0	1
<i>TRAIN</i>	0.862	0.347	0	1
Reliance on debt <i>DEBTPC</i> ('000)	38.338	13.451	12.483	90.935
Municipality wealth <i>OWNREV</i> ('000)	11.492	4.131	5.627	30.402
Municipal size <i>POPUL</i> ('000)	19.067	25.634	1	228

^a The compliance index in terms of per cent is the score in points multiplied by 100 and divided by the maximum total score of 67.

14.2 UNIVARIATE TESTS

In addition to the multiple regression analysis, a preliminary univariate analysis of all independent variables was conducted.

Appendix XV. reports the univariate correlation coefficients.

The intercorrelations between the independent variables are low to moderate. The highest is the correlation between Debt per capita (DEBTPC) and Own revenue per capita (OWNREV), which could be expected since municipalities having substantial debts need more financing by means of a higher revenue.

Some other relatively high correlations can easily be explained. For example, larger municipalities (POPUL) tend to have more experienced accounting employees; indeed such municipalities can more easily afford to engage former business accounting persons (EXBUSDICH).

The variable population is inversely related to the indicator Regional Treasurers (GEWONTV), which is logical since Regional Treasurers are linked to smaller entities.

The occurrence of related parties being "ordinary" municipal enterprises or municipal NFPOs (ORMNFPO) is positively related to the municipal size, which is also understandable.

Rather surprising is the finding that the municipal size is negatively linked to the level of education of the accounting staff (STAFF). The reason is likely the fact that larger municipalities need a lot more accounting persons and do not necessarily expect them to be academically trained. In other words, the additional staff members need not be academics. Therefore, the ratio "staff" will be smaller in a large municipality in comparison with a small municipality where the only few accounting persons, among which at least the Municipal Treasurer, are normally academics leading to a high "staff" ratio.

This finding indicates that the larger municipalities are somewhat systematically underestimated in level of staff.

Probably this reasoning may also explain why the factor Regional Treasurer (GEWONTV) is positively related to the ratio "staff". If a smaller municipality with a limited number of accounting employees disposes of an academically trained Regional Treasurer, which is likely because of his appointment by the Province, then the ratio "staff" increases more easily.

The independent variable external professional accounting consultant (CONSU) shows a negative relationship with the variable employees having business accounting experience (EXBUSDICH). Also this relationship is acceptable: municipalities having engaged persons with business accounting experience are less likely to additionally call in external accounting consultants.

14.3 MULTIVARIATE TESTS

14.3.1 Regression equation

Table 14.2 reports the regression results. Four variables appeared to show a negative relationship, although not a significant one.

Table 14.2: Regression results

Variables	Beta	Sig T	Tolerance	VIF
EXPERI	0.177	0.071	0.833	1.200
ORMNFPO	-0.068	0.505	0.744	1.343
CONSU	0.401	0.001	0.829	1.206
GEWONTV	-0.108	0.272	0.821	1.218
STAFF	0.055	0.578	0.797	1.255
PROVSTAFF	0.233	0.014	0.913	1.095
BIB	-0.063	0.494	0.931	1.074
EXBUSDICH	-0.063	0.515	0.842	1.188
TRAIN	0.193	0.041	0.907	1.103
DEBTPC	0.089	0.392	0.731	1.369
OWNREV	0.047	0.675	0.633	1.579
POPUL	0.261	0.010	0.787	1.271

R^2 36.78%
Adjusted R^2 27.42%

The observed F-statistic of the regression was 3.928 and significant at alfa 0.0001 which implies an acceptable goodness-of-fit.

The validity threat of multicollinearity is examined by calculating the tolerance factor or the variance inflation factors (VIFs) for all the independent variables, which are the reciprocal of the tolerance factor.

Since the VIFs (table 14.2) were all < 2 there is no significant indication of multicollinearity. The multicollinearity not being a threat can also be determined by observing Appendix XV. in which the mutual correlations are provided.

The regression residuals were checked for normality and constancy of variance with regard to the independent

variables. There are no significant distortions from the assumed regression conditions.

A normal probability plot of standardised residuals of the compliance index is included in appendix XVI. The different points are fairly scattered parallel with the diagonal.

In the next scatterplot the standardised predicted value of the compliance index is regressed with the standardised residuals to see whether there might not be a certain profile in the variances, which proves not to be the case. The variances are rather constant, which supports the conditions of the regression analysis.

14.3.2 Regression results

14.3.2.1 Experience

The study hypothesized H_{30} that the factor municipalities with at least one year of experience (EXPERI) would be positively related to the compliance index. The coefficient is only slightly significant ($\alpha = 7.1\%$) and one could have expected a more persuasive result.

A possible explanation for the limited significance of this determinant could be the following. Experienced municipalities have had to implement a new accounting system which was still in its infancy at that time and which was the subject of insecure, unsettled modifications. Another explanation could be the lack of mutual exchange of accounting experience preventing the valorisation of those extra years of experience.

14.3.2.2 Accounting and auditing relationships

The results for H_{31} are mixed. The variable: being associated with related parties such as "ordinary" municipal enterprises or municipal NFPOs (ORMNFPO) is not at all significant.

Apparently, the accrual accounting know-how which is present in those related parties is not strong enough as an incentive to the extent of compliance. Another interpretation could be that there is a kind of an **isolation** between the accounting staff of the related party and the municipal accounting staff. Some interviewees in the preliminary study (Christiaens 1996a) pointed in that direction. Anyway, the non-profit and in particular the governmental sector is not used to a rotation and movement of personnel as is the case in the profit sector, which also indicates a possible isolation of accounting techniques and habits.

On the other hand the support of professional accounting consultants (CONSU) is the most important explanatory factor of the *compliance index* ($\alpha < 5\%$). There appears to be an important positive influence from this side. An interview with one of the consulting firms pointed out that the major advantage of the professional consultant consisted of the combination of having to learn bottom-up the municipal administrative environment and having to apply their business accounting know-how adequately. This approach was to their knowledge far better than just transferring and blindly copying business accounting to municipalities without being interested in what a municipality is actually about.

14.3.2.3 Engagement

Hypothesis $H_{3,2}$ posited an association between the function of a Regional Treasurer and the level of compliance in that a Regional Treasurer is less dependent on the Municipal Council's decisions and has an extended experience since his appointment in other local governments as well. The findings do not confirm the hypothesis, the association is negative but insignificant. The fact that a Regional Treasurer is not significantly more affecting the level of compliance could perhaps be explained by his being overloaded with responsibilities in more than one local government.

14.3.2.4 Professionalism accounting staff

According to hypothesis H_{33} , the professionalism of the municipal accounting staff positively affects the *compliance index*.

The results are mixed. The most significant is the variable PROVSTAFF measuring the index: number of accounting employees graduated in the Provincial School for Administration / total accounting employees. This indicator reveals a significant positive association with the *compliance index*.

Municipalities with the attribute of training in the new municipal accounting (TRAIN) also significantly affect the *compliance index*.

However, not all the surrogates for measuring the professionalism of the accounting staff are significantly affecting the level of compliance. The variable STAFF which measures the average level of education of the accounting staff is not significant; the same is the case for the factor BIB which is the membership of professional accounting organisations. Regarding the memberships of BIB (Belgian Institute of Bookkeepers) there were only 2 municipalities which have a BIB member among their accounting staff. Not a single municipality had a member of IDAC (Belgian Institute of Accountants). These memberships can be regarded as mere exceptions which supports the aforementioned ideas about isolation and the consequences of the introduction of business accounting in "isolated" sectors. Traditionally the municipal bookkeepers³³¹ are less familiar with the business accounting language.

Lastly, the surrogate: having accounting employees with

³³¹ The relationships between municipal personnel and business-persons are rather limited. There are no institutes that unite accountancy staff of companies and governments as is the case in some other countries (e.g. NIVRA in The Netherlands).

business experience is neither associated with the compliance index, which is rather surprising. Many municipalities have (slightly exaggerated) "headhunted" and appointed persons from the private sector because of their business accounting experience. The aim was to conduct the accounting reform as effective as possible by engaging "internal" experts. Apparently, there is no significant effect on the level of compliance.

Some possible explaining ideas could be the following:

- NARGC is rather strict and seemingly allows fewer means for creativity;
- public sector accounting is complex even for experienced business bookkeepers;
- a business accounting system is not transferable just like that and maybe those business accounting experts have underestimated the complexity of the job;
- the officials who became new bookkeepers were looking up very much to the new system and perhaps systematically more than the "old hands" from a business environment. In other words, the bookkeepers with business experience ("old hands") are not hoping for extreme positive results and thus they are not excessively motivated³³²;
- The experienced accounting persons hired in might be bookkeepers mainly experienced in the technical aspect of the bookkeeping (the "doing"/operational) but with less ability to think in concepts and to organise the implementation of a new accounting system in a new situation.

³³² For the officials becoming bookkeepers accrual accounting is "new" and creates expectations; for the engaged bookkeepers having business experience ("old hands") accrual accounting is like "the same old song".

14.3.2.5 Reliance on debt

Hypothesis H_{34} posited an association between the reliance on debt (DEBTPC) and the level of compliance. the reliance on debt, as a management incentive, would lead to a superior level of compliance. The findings indicate no significant relationship. A suggestion would be that Flemish municipalities are less sensitive to financial markets and credit institutions than in other countries because of the specific situation of the Gemeentekrediet which is the bank of the local governments in Belgium. Also, the regulating and contracting on finance issues has never depended on annual accounts information.

14.3.2.6 Municipal wealth

More or less similar as for reliance on debt the hypothesized association H_{35} between the factor Own revenue (OWNREV) is found not to be significantly related to the *compliance index* either.

14.3.2.7 Municipal size

According to hypothesis H_{36} the municipal size would positively affect the level of compliance. The findings support a significant positive affection of the *compliance index* ($\alpha < 5\%$).

Some of the previous studies also observed a significant positive effect on the level of disclosure (Magann 1983). However, there are studies which found no significant relationship for municipalities (Evans & Patton JAE 1983; Robbins & Austin JAR 1986; Ingram & DeJong JAPP 1987 and Dwyer & Wilson JAPP 1989) and even studies with an observed negative relationship (Evans & Patton JAR 1987) or an assumed negative

relationship (Lüder 1990).

To cope with these rather contradictory findings an additional validity check on the population size was worked out.

14.3.3 Validity test population

One could argue that the contradictory findings are due to the fact that the factor size covers 2 opposite diverging subfactors, viz. a negative and a positive. This reasoning is commented in Chapter 4, 4.2 COMPLIANCE INDEX.

In municipalities where the negative factor is prevailing (e.g. municipalities which not eager to adopt the reform), the size is assumed to be negatively associated with the compliance index. In such municipalities, the larger the municipality, the lower the level of compliance.

On the other hand, in municipalities characterised by a positive factor (e.g. municipalities more open to reform, having relationship with other accounting professionals), the size is assumed to be positively associated with the compliance index. The larger the municipality, the better the compliance.

To capture the positive and negative factor a number of proxies were elaborated. For each proxy the municipalities are divided accordingly into 2 subsamples. Bivariate regression between the size measured by the population and the compliance index were conducted in the 2 subsamples.

The tested proxies were the following:

- * Having followed training courses in financial accounting.
- * Having permanently called in accounting consultants.
- * Having filled in negative remarks regarding the reformed accounting system in the open-ended question at the end of the questionnaire.
- * Promptness of providing the responses in the survey.
- * Promptness of the date of enactment of the annual accounts.
- * Having engaged business experienced accounting persons.

Except for one, all the proxies revealed positive regression coefficients³³³ accordingly for both the subsamples.

The only one where an opposite relationship was found was concerning the proxy: promptness of responses in the present survey. In the subsample of municipalities which have returned the questionnaire and the additional data rather quickly the found relationship size - compliance index was positive. However, in the subsample of the municipalities which have responded more slowly the found relationship was negative albeit insignificantly, which suggests that the larger the municipality, the worse the level of compliance. The conclusion is that the factor size does not strongly depend on other discriminating underlying factors.

³³³ Except for one subsample and except for the only negative relationship all the other subsamples had a significant (alfa 5%) Pearson's product moment correlation coefficient.

Chapter 15: Comparability, consistency

Most of the comparability issues have already been dealt with in the previous sections on the adoption and cross-sectional differences. Hereafter the type C comparability issues as defined in Chapter 4, 4.4.4.3 Type C: varying accounting practices are discussed, followed by a quantitative summary.

15.1 COMPARABILITY VALUATION OF OTHER INVESTMENTS

Other investments are defined as investments of which a municipality is the proprietor other than the shares Gemeentekrediet, which were previously examined in the section 13.3.6 Investments.

In an attempt to measure the comparability of the disclosed investments the recorded unit values per share of municipalities which hold shares of the same company were compared.

This approach could only be worked out for 58 municipalities. For the other 42 the annual accounts were either not sufficiently detailed or there was no first balance sheet 1st Jan. 1995 included to draw the data from.

Normally, municipalities holdings shares of the same intermunicipal organisation should enter the same unit value per share. The reason is that their interests in such organisations are acquired at the same conditions. Moreover, most of the intermunicipal organisations have sent out standardised letters³³⁴ to the municipalities confirming the individual number of shares for each shareholder and the general level of unit value at the time of the drawing up of the first

³³⁴ In a number of municipalities the first balance sheet 1st Jan. 1995 contained such standardised letters with an overview of all the individual shareholders.

balance sheet 1st Jan. 1995.

The findings are illustrated in table 15.1. Only those companies with at least 2 municipalities as shareholders are relevant to consider.

An important explanation of the differences is an incorrect "trade-off"³³⁵ between numbers and unit value (e.g. instead of disclosing: 3,172 shares of 1,000 BEF/share as it should be, one might show: 1 share of 3,172,000 BEF/share, which is incorrect and disturbs the correct information).

Table 15.1: Other investments: frequencies of unit value differences

Differences in unit values	Number companies	Total shareholders	Min. shareholders per cy	Average shareholders per cy	Max. shareholders per cy
Without any difference in unit value	53	279	2	5.3	20
With at least 1 difference in unit value	36	277	2	7.7	31
Total	89	556	2	6.2	31
With at least 1 difference in unit value other than the trade-off	29	197	2	6.8	30

This rough approximation of the comparability among the recorded unit values reveals that about 33% (i.e. 29/89) of the companies, whose shares are held by municipalities, are incorporated in the municipal annual accounts with differently recorded unit values. The empirical findings reveal that all

³³⁵ In a number of cases this kind of "trade-off" is made necessary due to the impossible punctuation of certain unrounded unit values in a certain software system.

considered municipalities are involved somewhere in one or another group of differing unit values. On the other hand the frequency of differences is limited to 1 or 2 per company.

Defining the importance of the difference as *Highest recorded unit value / Lowest recorded unit value*, the data³³⁶ reveal that the level of variance is at least factor 1.03 and at most factor 10.00³³⁷ with an arithmetic average of 3.03.

A possible explanation for these different unit values could be an incorrect "trade-off" other than the "easy ones" mentioned above. It is not impossible that the total value, being the multiplication of the number of shares times the unit value is correct but the number and unit value are not in the right proportion (e.g. number too low and thus unit value accordingly too high). This could explain the differing unit values and thus the seemingly weak comparability. However, the remark that the correct number and the correct unit value should be applied, remains important in order to get comparable Notes.

As one of the important softwarehouses, CEVI is *de facto* an intermunicipal organisation established in the form of a NFPO ("VZW") without having called up capital. Two member municipalities have apparently registered their funding (i.e. for an amount of 818,100 and 142,516 BEF) of CEVI as investments on their asset-side. The other CEVI members, which are assumed to have also funded CEVI, did not disclose their fundings as if it were investments. One could argue that such differing practices seriously weaken the comparability, even more so because the accounting information on valuation and numbers has been confirmed using standardised letters by most of the companies.

³³⁶ After leaving out the obvious number-units "trade-off".

³³⁷ Apart from 1 outlier implying factor 100.00.

15.2 LEVEL OF *DE MINIMIS*

15.2.1 Regulations

In business accounting no legal *de minimis* rule is foreseen. There is just the definition of fixed assets being means which can be used for more than one year (De Lembre 1996, p. 88). Nevertheless, the question of the *de minimis* rule in business accounting is solved in two ways. Firstly, the board of directors has to define the valuation rules according to art. 15 (RD 8th October 1976). At that moment this definition becomes their rule. Secondly, for business enterprises there is common practice in tax administration to recognise the price level of 10,000 BEF for distinguishing fixed assets vs. costs.

NARGC has not defined an exact rule concerning a *de minimis* level with respect to the financial accounting system. On the other hand, with regards to the budgetary accounting system there is the distinction of the Ordinary Service vs. the Extraordinary Service as addressed in Chapter 1, 1.3.3.3 Separation of services. Basically, the Ordinary Service contains the yearly occurring flows of revenues and expenditures, including the periodical redemptions of loans (art. 1 NARGC). The Extraordinary Service covers revenues and expenditures directly and permanently influencing the volume, value and maintenance of the municipal patrimony except for the normal maintenance (art. 1 NARGC).

The Ordinary Service seems to contain P/L flows whereas the Extraordinary Service is related with the balance sheet. However, such a distinction is not completely congruent with GAAP: it is not because certain expenditures occur every year that they might not be fixed assets. Vice versa, expenditures for elections do not occur each year but are included in the Ordinary Service (Verbeken 1995, p. 8).

The interviews with Municipal Treasurers reveal that sometimes a tendency³³⁸ exists to qualify certain flows as belonging to the Ordinary Service instead of placing them on the fixed assets in order to avoid a necessary preceding approval of the Municipal Council³³⁹. For activities in the Ordinary Service it is the Mayor and Aldermen who act as the Executives (art. 234 NGW) and the procedures are more flexible. Thus, transactions tend to be influenced by administrative procedures disregarding the kind of transaction itself. Obviously, this treatment influences the accounting practice and the comparability of the accounting output.

In order to get a more detailed picture of the current practices, the following questions could be raised:

- Has a *de minimis* level been applied?
- What are the different practices?

Table 15.2 attempts to answer these questions mainly based on question II-5.

³³⁸ The findings of Redant are similar (Redant 1995, p. 56).

³³⁹ Some accounting Executives motivate the practice by recognising the acquisition as a replacement and thus by charging directly in P/L (interview Municipal Treasurer).

Table 15.2: Frequencies de minimis practices

Criterion	All municipalities	Experienced
a) Level 15,000 BEF	13	0
b) Level 50,000 BEF	14	0
c) Other levels	31	5
c.1 0 BEF	20	1
c.2 10,000 BEF	3	-
c.3 20,000 BEF	1	1
c.4 30,000 BEF	1	1
c.5 100,000 BEF	6	2
d) Other rules	38	5
d.1 No (strict) rule	15	1
d.2 Distinction Ordinary - Extraordinary service	7	3
d.3 Lifetime	4	1
d.4 Lifetime, price	2	-
d.5 Lifetime, price, budget, use	3	-
d.6 Significant value surplus patrimony (replacements excluded)	3	-
d.7 Permanent influence patrimony (replacements included)	3	-
d.8 At least 1 mio BEF + depending on different factors	1	-
Data N/A	4	1
Total	100	11

15.2.2 Empirical findings

Table 15.2 reveals that 15 municipalities (i.e. 15/96 = 15.6%) do not apply a *de minimis* rule whereas the other 84.4% did apply a *de minimis* with a lot of varying practices.

The majority (i.e. 13+14+31 = 58) uses a price criterion with a range of 0 to 100,000 BEF³⁴⁰.

³⁴⁰ For the UK the *de minimis* level for the entry into the capital accounting system was set at £10,000 (i.e. about 500,000 BEF) according to CIPFA's guidance. In his survey of Local Authorities in 1995 Allen found that

The 100,000 rule is probably inspired by the legal level of purchases by private contract ("onderhandse opdracht"). Apparently this administrative rule is perceived as valid for the accounting treatment of fixed assets. Even two experienced municipalities remain applying this administratively inspired rule.

The other practices represent a variety of different points of view and attitudes, indicating that there is certainly a lack of framework and guidance.

The idea of transferring legal principles which regulate the budgetary accounting system towards financial accounting explains why 7 municipalities use the criterion Ordinary - Extraordinary Service.

The practices d.6 and d.7 seem to be contrary in that the first excludes replacements whereas the latter includes them. These findings indicate a confusion between the concepts of fixed depreciable assets (A) and fixed assets of which depreciations need not to be provided for (B)³⁴¹. In business accounting these two systems operate as follows:

- * The assets of system (A) are normally depreciated. At the time at which a replacement takes place, the old fixed asset is disposed of, the new one is posted at acquisition value on the asset-side and the yearly depreciation is started.
- * In system (B) the value on the asset-side is kept unchanged and depreciations are not at all recorded. The new acquisition, serving as a replacement for the old one, is just entered in the P/L account.

90% applied *de minimis*; for property the levels were in the range of £20,000-100,000 (i.e. about 1 mio - 5 mio BEF); for other assets £2,000-30,000 (i.e. about 100,000-1,500,000 BEF) (Allen CIGAR 1995, p. 17, 20).

³⁴¹ This kind of asset is often called "ijzeren voorraad" and is regulated in business accounting by art. 32 RD 8th October 1976. It is defined as small equipment (kits) with a steady use, a relatively low acquisition price and stable value. It is continuously maintained or renewed in order to provide always the same services.

In UK Local Governments³⁴² there are also some other kinds of fixed assets not being depreciated other than system (B) such as:

- assets with a long life which cannot be determined with reasonable certainty (in excess of 20 years);
- non-operational investment properties.

Unfortunately, the concept (B) and the concepts of UK Local Governments are not foreseen in NARGC. On the contrary, except for land **each fixed asset must be depreciated at a legally predefined rate!**

The introduction of system (B) in NARGC would have been very interesting and advantageous for different reasons:

- A typical feature of a governmental entity is that it should be able to provide continuously a number of steady services no matter the occasional level of demand and irrespective of the frequency and importance of its use. Moreover, this service-providing should disregard economic factors (e.g. a fire department has to serve the municipality no matter how many times, ...). Therefore, the municipality is making regular repairs and maintenance to extend the assets' useful life in its existing use. Depreciating these kinds of assets which are kept service-providing is not reflecting the reality. Such an approach is not necessary in a business enterprise where the output causes wear and tear to the equipment; where a charging for the use is needed; where new investments are not just replacements for the same function but improvements taking into account new products, amounts and qualities of outputs in respect of the pursued return on investment.

- The concept and know-how of system (B) is not new but

³⁴² Based on CIPFA Practitioner Guide for Implementing the New Capital Accounting Requirements on the Local Government SORP (Allen CIGAR 1995, p. 16).

already exists in other countries such as the UK.

- A large number of inventorying and technical accounting problems at the first drawing up of assets and liabilities would not have occurred such as e.g. the debates and problems around depreciation and revaluation of old buildings, constructions, churches, ...

- The concept (B) must have been known already in the former budgetary accounting system in which in the Extraordinary Service normal maintenance of fixed assets must be excluded and put in the Ordinary Service. In other words, normal maintenance in order to keep the fixed assets operational should not be recognised as an asset, which corresponds with concept (B).

The idea of system (B) is more or less taken over by some practitioners (d.2 and d.6) but it is not included in NARGC.

15.2.3 Experienced municipalities

Taking the experienced municipalities into consideration a first question to be raised would be: are the experienced municipalities applying the same rules as the non-experienced or not.

A second question is whether the disparities within the experienced municipalities are fewer than the disparities within the non-experienced or in other words: is the level of harmony of the practices of experienced municipalities higher than for the non-experienced ones?

The first question is approached by a X^2 test taking the frequencies of the price-rules together vs. the frequencies of the other rules. As could intuitively be guessed the X^2 test

does not reveal a significant difference³⁴³ ($\alpha = 0.05$) as between experienced and non-experienced.

This rough statistical test reveals that there is no significant difference in the applied rules when comparing the experienced with the non-experienced municipalities.

The second question refers to the calculation of the C-index measuring the harmony. It appears that the harmony regarding *de minimis* practices is in general very poor. The index for the experienced municipalities is even worse³⁴⁴ than for the non-experienced ones. It can seriously be argued that these findings indicate that the factor "experience" is of limited value. The experienced municipalities have not "learned" very much from each other. Another conclusion is that the transfer of accounting practices and know-how as well as the mutual communications are rather limited. Lastly, the problem of disharmony and uncomparability is not just temporary but it remains standing when taken into account the varying outcomes of the experienced municipalities.

15.2.4 Conclusions

Apart from the distinction between Ordinary Service and Extraordinary Service which is actually not congruent with the distinction between fixed assets and costs, there is a lack of regulations and prescriptions regarding the *de minimis*.

Moreover, there is the problem of "ijzeren voorraad" or in other words the discussion about "new" or "replacement" of capital assets, which is not sufficiently treated by the legislator and standard-setters although foreign suggestions and former experiences exist.

³⁴³ As there occurred a cell with an expected frequency < 5 , a binomial test was additionally worked out also resulting in an insignificant relationship.

³⁴⁴ See table 15.4 below.

Different findings indicate a supremacy of administrative procedures instead of a prevailing economic reality in the financial accounting system.

The general consequences are that the accounting practices regarding *de minimis* vary enormously, which has a serious impact on the comparability of annual accounts.

The experienced municipalities are faced with the same heterogeneity problems as the others, which undermines the importance of the factor experience. It is also very important to realise that these problems are not problems of the first moment.

As also proposed by Verbeken (1995, p. 8) it is recommendable to set up clear standards of classifications and to harmonise the *de minimis* practices. It is of course obvious that follow-up in practice by means of audit or other forms of control is a necessity.

15.3 PREPAYMENTS ON DIVIDENDS

15.3.1 Accounting regulations

In case of a definite dividend attributed by the Meeting of Shareholders the treatment in accounting is quite easy. At the time of the official announcement the dividend is recorded³⁴⁵ as an amount receivable on the assets-side in respect of an earned financial revenue in P/L. The receipt of the dividend a number of days later is just recorded as an increase of cash at bank and in hand towards a decrease of the amounts receivable.

But, a problem occurs when a municipality receives an advance on dividends at the year end before the Meeting of Shareholders has taken place in the next year. In this case the regulations become very unclear and there is actually no conceptual framework providing any useful answers.

According to the Guidelines Nuttynck 1996 (p. 3.) dividends should be recognised at the time of their notification. However, this regulation does not provide explicitly any comment regarding prepaid dividends and it remains unclear about the notification. The following question remains unanswered: "Is it a notification given by the Board of Directors or by the Meeting of the Shareholders?"

³⁴⁵ The applicable journal entry is literally described (Bodarwé & Laurent 1992, p. 137) as:

41516 Dividends receivable Dt

@ 75711 Financial revenue: income from shares in undertakings Ct

15.3.2 Empirical findings

As shown in table 15.3 the majority of respondents pretend that the prepayments are earned at the time they are received irrespective of their provisional character³⁴⁶.

Other municipalities consider them as prepayments until they become definite, which normally happens in the following year.

Table 15.3: Frequencies prepayments on dividends

Accounting practice	Frequency	%
Financial revenues	63	91.3%
As a debt	1	1.4%
Accruals/deferrals	5	7.2%
	----	----
	69	100%
Prepayments N/A	29	
Data N/A	2	
Total	100	

According to the traditional technical view, these prepayments should be recorded as liabilities³⁴⁷ until they are approved by the Meeting of Shareholders of the related party. The reasons for this procedure are firstly that these prepayments have not definitely been approved yet and that they can be recalled (principle of realisation). Secondly, they have not become certain yet (principle of prudence) (Christiaens CIGAR 1997, p. 11; Redant 1995, p. 76).

Just 1 municipality has recorded the prepayment as a

³⁴⁶ The Guidelines Nuttynck 1996, p. 3 are similarly implying that the prepaid dividends are earned at the moment of announcement. A few municipalities take the prepaid dividends for definitely granted as explicitly mentioned in their Notes.

³⁴⁷ In corporations there is an important exception: interimdividends appropriated by the Board of Directors and strictly regulated by Corporate Law (Art. 77ter). In this case interimdividends should be regarded as definitely earned and they should be accounted for as revenue.

liability. The other 7.2% have used accruals/deferrals³⁴⁸ to defer the profit effect to next year.

On the other hand, one could defend the point of view that such prepayments are as good as earned, because:

- in the local governmental sector municipalities tend to receive prepayments without ever having a recall;
- the profits of those related parties are fairly stable since they are providing public utilities in a more or less monopolistic situation;
- there is a strong administrative and political control over the related parties, which enables a steady dividend policy.

Moreover, even in business accounting context, rethinking the accounting treatment of conditional costs and revenues³⁴⁹ is being reconsidered. The tendency is to recognise conditional items based on a level of certainty, instead of delaying the recognition until the definite outcomes.

So far the problem of accounting treatment of these prepayments is not resolved.

Looking closer to the 5 + 1 deferring municipalities revealed no systematic relationship with a certain accounting consultant or whatever. An interview conducted in one of the "deferring" municipalities in a preliminary study (Christiaens 1996a) created the impression that some Municipal Treasurers communicate of-the-record and exchange ideas about accounting problems.

³⁴⁸ Most of the 5 municipalities have applied one of the "pure" accruals/deferrals (i.e. the account 4904 *Deferred income*). At least 1 municipality has recorded the deferral on the account 49800 *Amounts improperly received*, which is part of the suspense accounts. It is not entirely correct to use this kind of account since the prepaid amount is not at all improperly received.

³⁴⁹ Commission for Accounting Standards nr. 34 (1995) (*Commissie voor Boekhoudkundige Normen*): Matching of costs and revenues to the accounting period Advise nr. 148/6 (*Toerekening van kosten en opbrengsten aan het boekjaar waarop zij betrekking hebben*).

No matter which point of view of deferring or not is prevailing, the actual situation renders a fair comparison very difficult.

15.4 SATELLITES, RELATED PARTIES

15.4.1 Consolidation

In a number of cases certain municipal services are not being rendered by the municipality but by the "ordinary" municipal enterprises or by certain related parties being established in another juridical form. Examples are intermunicipal organisations, municipal NFPOs, etc.

Looking simultaneously at municipalities which are providing municipal services themselves and municipalities which are ceding such services to related parties leads to interpretation problems of the accounting outputs.

An important solution to avoid this kind of interpretation problems could have been the introduction of consolidation requirements. However, this subject is still in a very preliminary phase. Instead of looking at the congruence of accounting systems, the non-profit accounting regulations are somehow dealing with the problem of a proliferation (Christiaens 1996c): accounting systems are being created without being driven by an adequate conceptual framework and without mutual feed-back during the phase of development.

An increasing formal disharmony appears to exist in non-profit and governmental accounting and reporting standards (legal requirements and guidelines as well). Bouckaert & Leroy (1996, p. 557) point out in a critical way that there is an increasing diversity of governmental management and accounting regulations. They attempt to explain this phenomenon and propose some improvements.

These unsound relationships actually diminish the transparency and render consolidation and comparability very difficult.

Ideas, points of view and suggestions around consolidation in the governmental sector already exist. For example, Thenoz

(CIGAR 1995) worked out an analysis of the consolidation perimeter for the city of Angers in France. Inspired by American standards on governmental reporting (GASB 1987) and based on an empirical user need research Lande (CIGAR 1997) has suggested a concept of a consolidation perimeter for the French local public sector.

15.4.2 Relationship with OCMW

The relationships with "ordinary" municipal enterprises, municipal NFPOs, etc., are already described and particularly their influencing negatively the comparability.

An additional potential disturbing factor of the comparability is the relationship with the OCMW. The first balance sheet of a certain municipality reveals the property of the OCMW-building and the OCMW-real estate. It is quite likely that there are a number of other municipalities in which such real estate is the property of the OCMW itself and that the municipality is backing-up the financing of those buildings by means of a loan to the OCMW. It is quite obvious that the balance sheets and P/L accounts are going to differ systematically between such municipalities.

These relationship cannot easily be detected out of the annual accounts and there is no consolidation of the municipality's and OCMWs annual accounts either.

15.5 QUANTIFICATION OF THE COMPARABILITY

15.5.1 Calculation C-indices

Attempting to measure the comparability of a number of items of the annual accounts, the C-index as defined in Chapter 9: Measurement of variables. This approach as shown in table 15.4 does not give a complete and perfect view of the comparability, but it rather highlights several major issues. A detailed calculation of the C-indices is included in Appendix XVII.

Table 15.4: C-indices

Practices	C-indices
Valuation 205 Land of parks, ...	77.5%
Valuation 231 Land of roads	63.8%
Valuation 241 Land of constructions	52.6%
Valuation 261 Land of watercourses	46.9%
Valuation 211 Land of buildings	44.3%
Valuation 21X Buildings	21.5%
Valuation 235 Sewers	53.2%
Valuation 236 Waterpipes	62.8%
Valuation 237 Other networks	70.7%
De minimis level general	11.4%
De minimis non-experienced	12.6%
De minimis experienced	8.9%
Fixed assets movements schedule non-experienced:	12.2%
Fixed assets movements schedule C-index: experienced:	9.1%
Art patrimony	23.8%
Valuation shares Gemeentekrediet	65.4%
Stocks	97.9%
Accr./def. other than suspense accounts	57.1%
Accruals/deferrals: comments in the Notes	45.2%
Cut-off problems	25.4%
Pension provisions	86.3%
Provisions for risks and charges (other than pensions)	97.7%
Contingencies	52.8%
Prepayments on dividends	49.8%

15.5.2 Interpretations

The C-index calculations regarding the several items of land, buildings and networks need to be somewhat be criticized. The C-index counts the frequencies within each category and assumes that the elements belonging to a certain category are as such all comparable. The elements belonging to different categories are supposed to be completely in disharmony. These assumptions are not completely in correspondence with the reality: it is possible that a valuation in a certain category is of the same magnitude compared with a valuation in another category³⁵⁰ whereas two valuations being part of the same category may differ a lot.

This disadvantage is inherent to the C-index approach and has been commented in the section about concepts and constructs above. Therefore, the outcome of the index for the natures 205, 231 seems fair enough (respectively 77.5% and 63.8%), but looking at the enormously differing price levels within the categories the actual level of comparability is seriously lower.

All the same, the different categories express a different valuation point of view, a different attitude or with different consequences if later on some of the parameters change, notwithstanding their eventual similar monetary outcomes on the spot.

Regarding the other items of fixed assets the comparability of the valuation practices result in rather weak C-indices. The worst index is for buildings 21.5%.

The resulting indices for the valuation of networks are somewhat better particularly for natures 236 Waterpipes and 237 Other networks. This could be explained by the centralised professional support of intermunicipal organisations

³⁵⁰ An example of two different valuation rules leading to a similar valuation can be found in the section about the valuation practice of 235 sewers. The values resulting from the first legal option are not significantly different from those of the 2nd legal option.

maintaining these networks.

The comparability of the recognised de minimis levels is extremely poor for the non-experienced as well as for the experienced municipalities. The validity remark with respect to the valuation comparability regarding land and buildings is not applicable here. Therefore the C-index is fairly representative for the harmony of the *de minimis* practices.

For the fixed assets movements schedules the comparability has nothing to do with a valuation issue, but is a disclosure issue measuring the harmony of the disclosed information concerning content (design of the schedules). The findings reveal a very poor comparability of contents of schedules. Again the experienced municipalities do not show any better results, on the contrary.

In addition, it is noteworthy to mention that there is also a huge variety of lay-outs, applied terms, visual structures, which signifies a certain creativity and originality.

The harmony considering the art patrimony as to the valuation practices is very poor.

Although the relevance of the item shares Gemeentekrediet should not be exaggerated, the findings indicate that there is not really a uniform valuation. This is rather surprising because the financial structure of Gemeentekrediet being the central bank of all municipalities is transparent. Moreover, Gemeentekrediet has distributed standardised letters across the municipalities containing information in order to record the investments of its shares correctly and identically.

The very high C-index of stocks, which is exactly the same for provisions other than pensions is easily understandable. There is no municipality recognising stocks or provisions but one. Obviously, the adoption of accrual accounting is poorly succeeded for stocks and provisions, but "matter-of-factly"

the results remain untouched in terms of comparability. Almost the same can be said for the reasonable C-index for pension provisions.

The findings for accruals/deferrals, cut-off and prepayments which all concentrate on the recognition practices are weak in terms of harmony. The contingencies are just a disclosure item and their harmony is also poor.

15.5.3 Conclusions

Although the legislation is relatively strict, the municipalities seem to adopt the reform inconsistently in accounting objectives, principles, valuation and disclosure.

For most of the items the comparability is very poor and the experienced municipalities do not distinguish themselves by working different or by being more harmonious.

The earlier formulated hypothesis H_{40} with respect to the lack of comparability can be accepted given the empirical findings.

It is noteworthy that these C-indices have to be interpreted with care in that they do not measure the level of compliance with regulations and the importance of the incomparable differences neither.

The items with a lack of comparability must be treated with caution particularly towards users³⁵¹.

³⁵¹ Financial analysts and other users could act too hastily in already using municipal annual accounts aiming at performance appraisal and intermunicipal comparison without being sure of the comparability.

Conclusions

Nowadays there is a strong tendency in Belgium to reform non-profit and public sector organisations from cameralistic/cash accounting towards business/accrual accounting. The cameralistic/cash accounting systems which are primarily set up to measure and control the spending of budgetary means, are considered to be no longer satisfactory.

The objectives of the municipal accounting reform are in a first perspective the creation and improvement of management tools. In a second perspective the purpose is to improve the transparency and accountability towards (external) users. Obviously, this reform implies a changing role of accounting.

The accounting reform is generally based on the transferring of business accounting systems, principles and techniques aiming at transferring likewise its usefulness, financial insights and the resulting management tools.

The reform is specific in that *firstly* the typical non-profit characteristics and the differing municipal environmental factors have not sufficiently been taken into account; *secondly*, the supremacy of the budgetary accounting system and its principles are maintained; *thirdly*, the forced "marriage" with financial-patrimonial accounting leads to conflicts.

Previous governmental accounting research is rather scarce worldwide and almost non-existent in Belgium. Placing the accounting output (i.e. annual reports) as a central theme the previous studies can be divided into two groups. One group of studies is considering the explanation of the reform. The other group looks at the accounting disclosure and especially at its consequences, such as the effects on managerial, economic factors. In the first group some attempts were made to apply the "agency theory" in a governmental context and the "contingency theory" can be called the only existing framework

for explaining governmental accounting reforms. Between those two groups there is a certain gap of accounting research: very few studies empirically examined the adoption and implementation of a governmental accounting reform, its problems and difficulties in the "real world" and the reasons for the different outcomes. An important motivation for this empirical study is the fact that the reform, which is very topical, is a novelty in Belgium.

A major theme of this empirical accounting practice study is the implementation of the accrual accounting reform in Flemish municipalities and its compliance with the reformed accounting regulations and the consequent problems and disparities. The subject is mainly studied from a technical accounting practice point of view, although the usefulness of the new accounting output towards the users is also an important ingredient.

This first objective was elaborated using an exploratory, technical examination of the accounting practices based on a survey combined with interviews and an extensive set of archival data, viz. the first balance sheets and the annual accounts 1995. In order to measure the compliance a set of indicators was worked out inspired by the concept of assertions from the audit-discipline.

The second research objective is an attempt to explain the important cross-sectional differences in the level of compliance. In order to measure an overall level of compliance with regulations and requirements over the different municipalities a **compliance index** was developed consisting of 66 elements, which were primarily measured dichotomously.

A number of possibly affecting indicators derived from previous foreign research and from a pretesting of the Belgian topical context was empirically tested as to their association with the level of compliance. The objective is an attempt to explain the cross-sectional differences by using ordinary

least squares (OLS) statistics.

The final objective was to measure the extent of comparability of the municipal annual accounts, which is an important condition for the further successful use of the reformed municipal accounting output. This third objective was met through the application of the C-index as it is used in business accounting research.

A sample of 100 randomly chosen municipalities was willing to respond and cooperate; combined with interviews the return was successful and attained 100%. The annual accounts were used as a source of data and as a subject of the reform as well. The combination of the different research methods has contributed to the research validity in terms of triangulation.

Technical conceptual characteristics

The major conceptual characteristic of the accrual accounting system is the dominance of traditional budgetary accounting features. The reformed financial accounting system is subordinate when taking an important number of issues such as: obligatory technical link between the two systems, the recognition of costs and revenues, written off amounts, double counting loan redemption, recognition of loans, disclosure cash at bank and in hand, provisions for risks and charges, etc.

Apart from this "unbalanced marriage" the financial accounting system is burdened with specific features which are uncommon and unnecessary in GAAP and which can seriously be criticized. Examples are the obligatory unconditional yearly valuation correction on immovable patrimony, the very weak concept of the insurance value and overloaded, unnecessary use of suspense accounts.

There appears to be a lack of a conceptual framework for governmental accounting in Belgium, although the necessary know-how exists in a number of other countries. This lack explains the absence of accounting concepts/principles in NARGC regarding identity and ownership; the valuation of "community assets" and of property with a historic, cultural, social, military importance but missing an economic value; the distinction of assets acquired historically or by donations vs. assets in which funds are invested; consolidation, accounting measurement, etc.

Empirical findings

The empirical examination of the accounting reports reveals a high variance of accounting and disclosure practices. These findings are contrary to the presumed impression given by NARGC, which claims to strictly and uniformly regulate the accounting reform.

Regarding the timeliness only a few municipalities are in compliance although the results do not seem dramatic; 75% of the municipalities have finished their annual accounts 1995 before 1st October 1996. The factors accounting consultants, municipal size and the kind of software are not significantly associated with timeliness. As could be expected the factor experienced municipality is positively related although they were at least two months "late". Extrapolating this finding implies that the non-experienced municipalities will not be able to finish the annual accounts within the legal period in the coming years.

The first drawing up of assets and liabilities has caused a lot of practical problems. A major explanation is the non-availability of (historical) records mainly of non-monetary fixed assets. This problem should not be trivialized and the legislator could have considered the exclusion of a number of of fixed assets to reduce the high inventorying efforts and

the discussible problems considering assets from the past and community assets. On the other hand the first drawing up has provided some information and advantages regarding capital management.

A lot of remarks can be made on the accounting treatment of fixed assets and art patrimony. An important issue are the boundary problems. There appears to be a lack of unambiguous distinction of municipal property vs. property of related parties or others. Looking at the omissions admitted by 16% of the municipalities, the inconsistencies of certain items such as the non-disclosure of any office building nor Town Hall and the lack of clarification, the completeness of the annual reports can be questioned. Misclassifications of items affecting valuation and depreciation often occur, but they are mostly left unclarified in the Notes.

The main part of the remarks concern the valuation. For all categories of fixed assets for which the municipality did have an option, the majority (i.e. 60% to 92%) has decided to select the "alternative" valuation rule which implies an estimation. However, the examination reveals that the conditional motivation of improving as such the realistic view of the current value is almost never given. An explanation could be that the "alternative" valuation rule facilitates the disclosure management and avoids the strict and uncontrollable NARGC rule. Moreover, this "estimation" is not further defined legally. This also explains the occurrence of a variety of applied so-called rules such as estimation value; insurance value; new built value, forced sales value, rent value, current value, etc.

An important finding is the extreme divergence of the applied values per m² for land of the roads, watercourses and buildings for respectively factor 45, 43, 119 times (=highest/lowest) and the spread in values per citizen of factor 340, 53 times (=highest/lowest) for buildings for sport, .. and public

lighting (outliers were excluded). Only the divergence in the unit values per citizen of networks is mitigated (for sewers the spread is about 9 times), probably due to the accounting information support of technicians of intermunicipal network organisations. One could argue that this divergence is at least partly caused by a lack of economic market mechanisms in order to define values; a second reason are the arbitrary uncontrolled estimation practices of an enormous historically grown heritage. These findings imply the need for a monitoring function (e.g. by Oversight Bodies).

Assets unexpectedly not disclosed were mostly constructions, watercourses, waterpipes and other networks probably because of a different juridical ownership.

Considering the Notes, the disclosure of fixed assets movements schedules revealed a poor compliance rate (i.e. 70%). The schedules developed by the professional consultants are perfectly in compliance, which is not the case for most of the other schedules. Generally, the comparability of the schedules is very poor; a standardised form could improve this situation.

A very weak conformity with the aimed accrual accounting was found in the recording and disclosing of **provisions, off balance sheet items and contingencies**. Apart from one neglectable occurrence, pension provisions for Mayor and Aldermen and for municipal staff which is applicable in 7% of the municipalities and which actually represents huge amounts, are not disclosed in any municipality. Even OCMW deficits for which the municipality is liable or any other off balance sheet items, litigations were not disclosed in any of the annual accounts. Only bank guarantees and similar items are disclosed in merely 37% of the municipalities. These findings are not at all in line with the patrimonial view. Obviously, the intergenerational equity cannot be assessed or respected and it is quite clear that thus annual accounts are actually incomparable. It is noteworthy to mention that there exist a

lot of misunderstandings and confusions, even in the legislation and guidelines about the distinction between reserves and provisions for risks and charges.

Concerning **accruals/deferrals** the compliance is very weak and often rules are misunderstood, 70% does not disclose any "pure" accrual/deferral in the balance sheet. Although the monetary importance is limited, 58% is not in conformity regarding the **yearly revaluation of immovable assets**, mostly due to irregularities in taking cut-off adjustments in the calculation into account. This finding could not be attributed to the kind of software, but rather to the weak instructions and guidelines.

The **cut-off** depends on budgetary decisions, not on the economic reality: as such a varying budgetary and financial management influences the applied cut-off practices. There is a large heterogeneity of cut-off practices, which disables comparability.

Balance sheet **compensation** and **misclassification** on a certain cost account occurred in about 20% of the municipalities. On the assets-side 10% of the municipalities showed unexpected negative signs and on the liabilities-side 20%. These findings were not significantly related to the factors experienced municipalities, bookkeepers with accounting experience or professional consultants. An explanation could be the dominant formal system of classification derived from the budgetary accounting context and the incorrect focus on documents instead of on the economic transaction described in the documents.

Valuation rules are not disclosed in 22% of the annual accounts. The approach of the others varies enormously. However, none of the municipalities disclose any comment on boundaries, written-off amounts, cut-off practices, level *de minimis*, nor on any other relevant issue. The disclosed valuation rules mainly stress the letter of the rule than its

contents and they are vary a lot. Regarding provisions and accruals/deferrals, the valuation rules in the first balance sheet were disclosed in about 80% of the reports, but when looking at the annual accounts 1995 this level decreases to less than 50%. The annual accounts showing double-sided rules, ambiguous rules, unclear rules or optional legal rules without indicating the chosen option, are difficult to interpret.

Attempting to explain the **cross-sectional compliance differences**, a regression analysis reveals that the factor experienced municipality is merely an explanatory positive factor.

The most important explanatory factor is the assistance of professional accounting consultants. Another significant positive factor on the compliance index is the municipal size even if the validity of the factor size is further analysed.

The effect of the qualities of the accounting staff are mixed. The fact that accounting staff graduated at the Provincial school or followed training courses significantly affects the level of compliance in a positive way. However, the level of education, the membership of professional accounting organisations (BIB, IDAC) and the factor "bookkeepers with business accounting experience" are not significantly associated with a superior level of compliance. The very low number of memberships BIB and IDAC also points at a kind of professional isolation.

The finding that the factor "bookkeepers with business accounting experience" does not affect the level of compliance is surprising, but it can be explained by the complex character of municipal accounting, the strict NARGC rules and the underestimation of the typical features of government administration.

As for the remaining findings, the hypotheses cannot be confirmed. The relationships with "ordinary" municipal

enterprises and NFPOs are not significant which implies the assumed isolation. The factor engagement of the Regional Treasurer is not significant either. Contrary to previous American findings the reliance on debt and municipal wealth are also insignificant.

Applying the concept of the C-index generally reveals a weak **harmonisation and comparability** although the rather strict character of the accounting legislation creates the impression of a thoroughly regulated reform.

Items with a weak comparability appear to be the accounting issues which have not been regulated very well by the standard-setters and guidelines (prepayments dividend $C = 49.8\%$, fixed assets movements schedule $C = 12.2\%$) or for which the legislator has remained rather ambiguous (valuation buildings $C = 21.5\%$; art patrimony $C = 23.8\%$) or for which there is a conflict situation with budgetary accounting (level *de minimis* $C = 11.4\%$, cut-off $C = 25.4\%$).

Based on the fact that the experienced municipalities do not perform any better in terms of comparability (and even worse on the level *de minimis* and on the fixed assets movements schedule), one could conclude that the comparability will not automatically increase during the coming years.

In summary, the following generalised conclusions and ideas can be formulated:

* The new financial accounting system does not seem to have been made **indispensable**, which might weaken the application and the continuity. In other words, the financial accounting system is not ensured to last since:

- financial accounting has not been made necessary to manage a municipality;
- there is a very limited use of the annual accounts by stakeholders and citizens;
- there is a lack of professional audit following-up the

implementation and outcomes;

- the financial accounting system is not made sufficiently important: the budgetary resources do not depend on the financial accounting system;
- consolidation using the single accounting output is not regulated.

* Since it seems a necessary task it is advisable to install a professional **follow-up** of the implementation and to provide professional guidance especially during the first years. This task could be delegated to professional institutions or Oversight Bodies.

* There appears to be a kind of **isolation** of the accounting staff vis-à-vis business accountancy: there are almost no memberships of professional accounting institutions. Apparently the link with accrual accounting know-how from related parties is also limited.

The business accountants seem to have a lack of non-profit accounting know-how, particularly of governmental accounting. Looking at the professional accounting consultants this know-how should be built up bottom-up, instead of copying top-down business accounting concepts.

* The **use of the new accounting product** should be examined and predetermined. One should know already what to do with the output instead of waiting for possible occurring opportunities. Further examination of the user possibilities of the new accrual accounting system towards management accounting and management control systems could be interesting. Studying the extension of budgetary management to the management using accounting tools could also be an interesting topic.

Hopefully this study will contribute to a better understanding and an improvement of transferring business accounting systems

to a governmental environment, which has in terms of accounting been neglected for a long time. Yet the novelty of the reform, the exploratory character, the many tentacles in other disciplines, the dynamic subject and the broad spread of the accounting issues have imposed a number of limitations and have somehow affected the quality and methodology of this study.

Although showing a certain interest for usefulness of the reformed accounting system, this accounting practice study does not reveal the user need implications of the accounting reform which would also be an interesting topic for further research.

Other ideas for further research could be the establishment of a longitudinal overview of the comparability; an enlargement of the empirical research to Walloon municipalities or to other governmental unities for example the ongoing OCMW-reform, ...

Conceptual questions can also be raised regarding the consolidation of local governments. Furthermore, there is a need for normative research concerning governmental and non-profit accounting regulations and practices (e.g. community assets).

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Zimmerman, J.L. (1977), "The municipal accounting maze: An analysis of political incentives", *Journal of Accounting Research*, Vol. 15, Suppl., p. 107-144.

Zirolto, G. (1994), *Du supplement d'informations dans la nouvelle comptabilité communale*, Bachelor thesis 93-94, Catholic University Mons, unpublished, pp. 85.

Legislation

(in chronological order)

Regent Decree 10th February 1945 containing the general regulations on the municipal accounting

Law of 9th July 1975 concerning the control of insurance companies, Belgian State Journal 29th July 1975

Law of 17th July 1975 regulating business accounting, Belgian State Journal 4th September 1975

Royal Decree of 14th December 1987 regulating hospital accounting, Belgian State Journal 1st September 1987

New communal law, Royal Decree of 24th June 1988, Belgian State Journal 3rd September 1988

Royal Decree of 2nd August 1990 containing general regulations on the municipal accounting, Belgian State Journal 3rd October 1990

Ministrial Circular Letter of 26th October 1990 concerning the municipal accounting reform, Belgian State Journal 22th December 1990

Ministrial Decree of 30th October 1990 regulating the articles 19 and 21 of the Royal Decree of 2nd August 1990 containing general regulations on the municipal accounting, Belgian State Journal 22th December 1990; modified by Ministrial Decree of 1st February 1994, Belgian State Journal 19th February 1994

Ministrial Decree of 30th October 1990 regulating the article 44 of the Royal Decree of 2nd August 1990 containing general regulations on the municipal accounting, Belgian State Journal 22th December 1990; modified by Ministrial Decree of 25th March 1994, Belgian State Journal 15th April 1994 and 6th June 1994; modified by Ministrial Decree of 29th April 1996, Belgian State Journal 24th May 1996

Ministrial Circular Letter of 17th December 1990 concerning the abolition of regulations prescribed by the Regent Decree of 10th February 1945, Belgian State Journal 1st January 1991 and 22th January 1991

Royal Decree of 22th February 1991 containing the general regulations regarding the control of insurance companies, Belgian State Journal 11th April 1991

Law of 15th March 1991 installing the reform of the general State accounting system and the Provincial accounting system, Belgian State Journal 22th May 1991

- Ministrial Decree of 23th September 1991 regulating the accounting documents in execution of article 44 of the Royal Decree of 2nd August 1990 containing general regulations on the municipal accounting, Belgian State Journal 21th October 1991;
modified by Ministrial Decree of 10th January 1996, Belgian State Journal 31st January 1996
- Ministrial Decree of 28th April 1993 regulating the administrative oversight on the municipalities for the Flemish Region, Belgian State Journal 3rd August 1993
- Ministrial Circular Letter BA-G-93/05 of 23th June 1993 concerning the Ministrial Decree regulating the administrative oversight on the municipalities of the Flemish Region, Belgian State Journal 3rd August 1993
- Ministrial Circular Letter of 11th July 1994 concerning the municipal accounting reform: application of the new regulations, Belgian State Journal 17th August 1994
- Circular Letter BA 95/2 of 31st January 1995 concerning New Municipal Accounting: Notes to be provided clarifying the first balance sheet, Ministry of the Flemish Community
- Guidelines concerning end of the year accounting activities, Ministry of Internal Affairs, Office New Municipal Accounting, D. Nuttynck, 5th January 1996, updated 22th March 1996
- Circular Letter BA/FB 96/3 of 3rd April 1996, concerning the Notes related to the annual accounts and budgetary account, Belgian State Journal 21th May 1996
- Decree of the United Community College of the Brussels' Capital District of 5th December 1996 regulating the accounting systems of the OCMWs, Belgian State Journal 24th December 1996
- Decree of 8th July 1996 regulating the adaptation of the budget 1996, Belgian State Journal 19th October 1996

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	Zimmerman JAR 1977	Magann 1983	Baber JAE 1983	Baber & Sen JAPP 1984	Ingram JAR 1984	Evans & Patton JAE 1983	Evans & Patton JAR 1987	Robbins & Austin JAR 1986	Ingram & DeJong JAPP 1987
	State regulation*								
	Statutory barriers								
	State effect*								
	State effect								
	State effect*								
	Government form - Manager - mayor*	Government form - Manager - Mayor				Government form - Manager - city*	Government form - Manager - mayor*	Government form - Manager - Mayor	Government form
	Auditor CPA				- Auditor CPA				Audit firm size*
		City's internal needs - Scope - Complexity - Financial data - Demographic					Prior CCP win*	Prior CCP win Company town	
Independent Variables	Responsiveness Degree of audit Length reports	Number pages Number exhibits Timeliness Audit opinion MFOA certificate	State's yearly audit budget (2)	Use of GAAFR fund	Accounting practices: "Disclosure index"	Certif. of Conform. Program (CCP) MFOA	Certif. of Conform. Program (CCP) GFOA	Accounting practices: "Disclosure index" "Compound index"	Accounting practices: "Disclosure index"
Analysis	Chi squared tests	PROBIT analysis Mult. regression	Univar. correlation Multivar. analysis	PROBIT analysis	Univar. correlation Multivar. analysis	PROBIT analysis	PROBIT analysis	Univar. correlation Multiple regression	Univar. correlation Mult. regression

Author	Year	Journal	Topic	Method	Findings
Giroux	JAPP 1989	Dwyer & Wilson JAPP 1989	Banker, Bunch & Strauss 1989	Carpenter & Feroz AH 1990	Cheng JAPP 1992
					Volmer 1992
					Coy, Tower & Dixon FAM 1994
					Allen & Sanders FAM 1994
					Christensen & Mohr FAM 1995
<hr/>					
GAAP required*	Regulatory constraints*				
					GAAP required
<hr/>					
Government form - Manager - Mayor*	Government form - Manager - Mayor	Monitor. incentives	Monitor. incentives voters	Organ. pressure groups	Government form - Manager - Mayor*
- Audit opinion*	Audit opinion*				
- Indep. auditor*	Auditor CPA*				
- Auditor print. ann. acc.*					
- Auditor's busy season					
					Outside audit
					Outside audit
<hr/>					
"Disclosure index": Pension and benefit, budget format and statistical section	Timeliness	Accounting practices: "Disclosure index"	Adoption GAAP	Accounting disclosure: "Disclosure index"	Accounting practices: "Disclosure index"
					"Disclosure index" Distribution report
					Accounting practices: "Disclosure index"
					Accounting practice: capitalizing additions
<hr/>					
Multiple regression	Descriptive Multiple regression	Multiple regression	Descriptive	LISREL (= factor analysis + multiple regression)	Multiple regression Descriptive Multiple regression
					Univariate analysis Logistic regression
					Multiple regression analysis

Appendix II. List of interviewees in the pretesting phase

(in alphabetical order)

Accounting Consultants

Maebe, M., Accountant, Euraccounts, Aalst, 28th May 1996

Experts

Bruggeman, W., Professor, Vlerick School voor Management, Gent, 7th April 1995
Debackere, K., Professor, Vlerick School voor Management, Gent, 28th March 1995
Dendauw, C., Adviser, Instituut der Bedrijfsrevisoren, Brussel, 9th February 1995
Jegers, M., Professor, Vrije Universiteit Brussel, Brussel, 22th February 1995
Leroy, J., Adviser, Vereniging van Vlaamse Steden en Gemeenten, Gent, 23th April 1996
Lint, M., Adviser, Gemeentekrediet, Brussel, 18th January 1995
Martens, W., former Municipal Treasurer and author, Zingem, 2nd July 1996
Slabbaert, P., District Inspector, Ministry of the Brussels' Capital District, Brussel, 24th January 1997
Vermeiren, L., OCMW-Treasurer Lebbeke, Lebbeke, 25th January 1995

Municipalities

Blomme, J., City Treasurer Brugge, Brugge, 2nd February 1995
Hellebosch, R., Regional Treasurer Kruishoutem, Kruishoutem, 14th May 1996
Michem, F., Head bookkeeper, Dendermonde, Dendermonde, 17th April 1996; Dendermonde, 9th October 1996
Pauwels, City Treasurer Knokke, Brugge, 15th April 1997
Redant, O., Alderman of Finance Aalst and Persoons, P., Adviser Aalst, Aalst, 29th May 1996
Van Goethem, F., Municipal Treasurer in charge Hamme and Luckx, N., Bookkeeper Hamme, Hamme, 3rd May 1996; Van Goethem (phone), 9th October 1996
Van Vijnckt, H., Municipal Treasurer Oostkamp, Oostkamp, 8th May 1996
Verbeken, D., City Treasurer Gent, Gent, 15th May 1996

Provincial Oversight Bodies

Braet, P., Provincial Accountable Executive Province West Flanders, Brugge, 13th May 1995
Struyve, B., Audit Executive Province East Flanders, Gent, 5th June 1996
Van Torre, R., Audit Executive Province West Flanders, Brugge, 6th June 1996

Softwarehouses

Anthonis, J. *Executive* Vlabric and Knaepen, Y. *Informatician*
Vlabric, Leuven, 15th May 1996
Beyen, P., *Accountant* CEVI and Goderis, G., *Informatician*
CEVI, Gent, 9th April 1996
Mens, J., *Informatician* CIPAL, Geel, 30th May 1996
Vanderstraeten, P., *Coordinator* Schaubroeck and Vanhautte, L.
Informatician Schaubroeck, Nazareth, 13th May 1996

Appendix III. List of interviewees survey

(in alphabetical order)

Municipalities

Aarschot: M.C. Vencken, City Treasurer, Aarschot, 14th February 1997
Bever: M. Hemmerechts, Municipal Secretary, Bever, 10th February 1997
Boechout: M. Mertens, Municipal Treasurer, Boechout, 7th February 1997
Boom: B. Smits, Municipal Treasurer, Boom, 7th February 1997
Borgloon: I. Borgerhoff, City Treasurer, Borgloon, 17th January 1997
Drogenbos: M. Spits, Regional Treasurer, Drogenbos, 26th February 1997
Edegem: W. Deckx, Municipal Treasurer, Edegem, 31st January 1997
Halen: M. Wouters, City Treasurer, Halen, 17th February 1997
Herent: M. Bollens, Municipal Treasurer, Herent, 6th February 1997
Kluisbergen: G. Meurez, Municipal Treasurer in charge, Kluisbergen, 10th February 1997
Leopoldsborg: R. Caels, Municipal Treasurer, Leopoldsborg, 28th February 1997
Linkebeek: M. Notebaert, Regional Treasurer, Linkebeek, 10th February 1997
Linter: A. Uytebroek, Regional Treasurer, Linter, 3rd February 1997
Meeuwen-Gruitrode: J. Caymax, Municipal Treasurer, Meeuwen-Gruitrode, 14th February 1997
Moorslede: M. Hemerijck, Municipal Treasurer; Moorslede, 11th February 1997
St-Katelijne-Waver: M. De Donder, Municipal Treasurer, St-Kat-Waver, 6th February 1997
St-Pieters-Leeuw: W. Van Lint, Municipal Treasurer, St-Pieters-Leeuw, 26th February 1997
Zwijndrecht: I. Van Schaverbeeck, Head bookkeeper, Zwijndrecht, 19th February 1997

Appendix IV: Sample sizes municipalities

	Country	Total (A)	Gross Sample size (B)	Coverage (B)/(A)	Reliability test sample size	Selection criterion	Response rate	Control Nonresp. bias	Data sources
Zimmerman JAR 1977	USA	2,505	168	6,7%	No	Matched sample	73,0%	Yes (a)	Ann. reports
Evans & Patton JAE 1983	USA	1,032 (> 25,000 cit.)	1,032	100,0%	N/Ap	Complete	100%	N/Ap	Diff. sources
Magann 1983	USA	N/A (> 10,000 cit.)	650	N/A	No	Random	27,1%	N/A	Ann. reports
Robbins ABR 1984	USA	N/A	200	N/A	No	Random	42,0%	No	Questionnaire
Robbins & Austin JAR 1986	USA	N/A (> 50,000 cit.)	200	N/A	No	Random	49,5%	Yes (b)	Ann. reports
Ingram & Copeland 1986	USA	800 (> 25,000 cit.)	800	100,0%	No	Complete	76,5%	No	Ann. rep. + quest.
Ingram & DeJong JAPP 1987	USA	1,300 (> 20,000 cit.)	800	60,0%	No	Random	68,0%	No (c)	Ann. rep. + quest.
Evans & Patton JAR 1987	USA	N/A	650	N/A	No	Random	68,3%	No	Questionnaire
Ingram & Robbins 1987	USA(ii)	N/A	642	N/A	N/A	Stratified random/random (d)	54,8%	N/A	Questionnaire
Dwyer & Wilson JAPP 1989	USA	N/A (> 25,000 cit.)	194	N/A	N/A	Intentional (e)	81,0%	No (f)	Questionnaire
Giroux JAPP 1989	USA	167 (> 100,000 cit.)	167	100,0%	N/Ap	Complete	79,6%	No	Ann. reports
Allen & Sanders FAM 1994	USA	1,002 (> 20,000 cit.)	1,002	100,0%	N/Ap	Complete	44,9%	No	Questionnaire
Jones & Pendlebury ABR 1982	UK (ii)	457	60	13,1%	No	Random	100%	N/Ap	Ann. reports
Chandler & Cook FAM 1986	UK (ii)	456	49	10,7%	No	Random	100%	N/Ap	Ann. reports
Butterworth, Gray & Haslam FAM 1989	UK (iii)	500	39	7,8%	N/Ap	Complete sub-samples (d)	58,0%	No	Ann. reports
Jones & Pendlebury FAM 1991	UK (ii)	450	64	14,2%	No	Random	77,0%	No	Questionnaire
Scheid & Lande 1995	France	842 (> 10,000 cit.)	842	100,0%	N/Ap	Complete	100%	N/Ap	Ann. reports
Faber & de Jong 1988	Netherlands	741	50	6,7%	No	Random	36,0%	No	Questionnaire
Volmer 1992	Netherlands	741	50	6,7%	No	Random	100%	N/Ap	Ann. reports

(i) Municipalities, counties and school districts

(ii) Local authorities in England and Wales

(iii) Restricted to shire counties

N/A = Data not available

N/Ap = Not applicable

(a) Tests of differences in means (z-scores) between responding and nonresponding

(b) After a follow-up mailing non-response bias was measured by comparing the extent of disclosure for 15 randomly selected cities initial request with the last 15 cities responding to the follow-up inquiry; not significant at $\alpha = 0.05$.

(c) A follow-up mailing was sent to nonrespondents, but no further testing of the rest of nonrespondents.

(d) Stratified random for municipalities > 20,000 cit.; random for municipalities < 20,000 cit.

(e) Based on availability of data

(f) Indirectly based on the quality of distribution across all municipalities.

Appendix V: Macros for creating random numbers

```
\R      {CALC}{IF COUNT<100}{MACRO}  
      {QUIT}
```

This macro creates the random numbers based on the random generating function; the macro counts until the number of 100 is reached. The random generating function is adapted to result in a random number starting from 1 up to 308 by the formula $RANDOM * (308 - 1) + 1$

```
MACRO  {CALC}{IF ROUND=INDEX}{BRANCH \G}  
      {PUT RANGE;1;ROUND-1;ROUND}{BRANCH \R}
```

The macro above compares the generated random number with the already found random numbers and puts it in the column SELECTION. If that number was already chosen, the macro starts again in a looping.

```
\E      /RESELEC ~ {CALC}
```

This macro is used to erase the column SELECTION.

RAND		ROUND	INDEX
0,625172	192,93	193	0
0,625172	192,93	193	0
RANGE		SELECTION	
		1	
		2	2
		3	3
		4	
		5	
		6	6
		7	
		8	
		9	
		10	
		11	11
		12	12
		13	
		14	14
		15	15
		16	16
		17	17
		18	
		19	
		20	
		21	
		22	
		23	
		24	
		25	

Appendix VI: List of the 100 sampled municipalities

AALTER	LEUVEN
AARSCHOT	LICHTERVELDE
ALKEN	LIER
ARENDONK	LINKEBEEK
AS	LINTER
ASSENEDE	LOCHRISTI
AVELGEM	LOKEREN
BAARLE-HERTOOG	MEEUWEN-GRUITRODE
BALEN	MESEN
BEVER	MOL
BOECHOUT	MOORSLEDE
BOOM	NEVELE
BORGLOON	NIEL
BORSBEEK	NIJLEN
BRAKEL	NINOVE
DE PANNE	OOSTKAMP
DENDERLEEUEW	PEER
DENDERMONDE	PITTEM
DIEPENBEEK	RANST
DROGENBOS	RAVELS
EDEGEM	RETIE
ESSEN	RIEMST
GALMAARDEN	RIJKEVORSEL
GENT	SCHERPENHEUVEL-ZICHEM
HAALTERT	SPIERE-HELKIJN
HALEN	STEKENE
HAMONT-ACHEL	ST-KATELIJNE-WAVER
HASSELT	ST-LAUREINS
HEERS	ST-NIKLAAS
HERENT	ST-PIETERS-LEEUEW
HERENTHOUT	TIELT
HEUVELLAND	TONGEREN
HOEGAARDEN	TORHOUT
HOOGLADE	VILVOORDE
HOUTHULST	VORSELAAR
HOVE	WAREGEM
JABBEKE	WERVIK
KALMTHOUT	WESTERLO
KAMPENHOUT	WEVELGEM
KAPellen	WICHELEN
KLUISBERGEN	WINGENE
KOKSIJDE	WOMMELGEM
KONTICH	WUUSTWEZEL
KORTENBERG	ZELE
KRUIBEKE	ZEMST
LAAKDAL	ZOMERGEM
LANAKEN	ZOTTEGEM
LANDEN	ZOUTLEEUEW
LEBBEKE	ZWALM
LEOPOLDSBURG	ZWIJNDRECHT

Appendix VII.A Questionnaire (English version)

X, Municipal Treasurer

...
...

4th December 1996

Cc. College of Mayor and Aldermen

Re: Municipal accounting and annual accounts 1995

Dear Sir,

Within the scope of a **scientific research regarding municipal accounting** we sent you on November 12th 1996 a questionnaire. Unless we are mistaken, we have not received your answer yet. Therefore we would like to ask you to fill in the questionnaire and to return it together with the **beginning Balance Sheet** and the Annual Accounts 1995 please.

Please give us a call if you would like to receive another form.

We guarantee the absolute confidentiality of these data.

Of course this letter can be regarded as non-existent if the mailings crossed each other.

Looking forward and thanking in advance.

Yours sincerely,

Prof. Dr. E. De Lembre

J. Christiaens

Municipal Treasurer

...
...

20th November 1996

Cc. College of Mayor and Aldermen

Re: Municipal accounting and annual accounts 1995

Dear Sir,

In the department Accountancy and Management Control we are working out a scientific empirical study regarding the implementation of the new municipal accounting under the direction of Prof. Dr. E. De Lembre.

In respect of this research we would like to ask you to fill in and return the enclosed questionnaire. We also would like to receive a copy of the beginning Balance Sheet (the very first) and of the Annual Accounts 1995, for which we are very grateful.

We guarantee the absolute confidentiality of your data and we shall acquaint you with the aggregated results of this study (only non-identifiable results will be made public in order to guarantee the confidentiality).

Looking forward and thanking again for your cooperation.

Yours sincerely,

Prof. Dr. E. De Lembre

J. Christiaens

Enclosed: Questionnaire as to Municipal Accounting Research

QUESTIONNAIRE MUNICIPAL ACCOUNTING
to the
Municipal Treasurer

Please fill in this form and return it together with the
beginning balance sheet and the annual accounts as of 31th
December 1995 before 2nd December 1996 to:

UNIVERSITY of GENT
Accountancy J. Christiaens
Hoveniersberg 4
9000 GENT

MUNICIPALITY:
Name, firstname:
Function:
Phone:

INSTRUCTIONS

1. OBJECTIVE OF THE RESEARCH

It is our objective to collect actual data in respect of the implementation and adoption of the new municipal accounting, the annual account practices and the possibly occurring difficulties.

These data are going to be very useful in order to obtain a complete picture and ideas concerning the outcomes of the reformed municipal accounting.

2. CONTENTS

The questionnaire is divided into three groups, namely the municipal accounts, the accounting practices and the accounting background.

3. CLARIFICATIONS ABOUT FILLING IN AND RETURN

- 3.1 If questions that might have several answers occur, please give an explanation.
- 3.2 When numbers or hours or being asked, a reasonable approximation is satisfactory.
- 3.3 The data on this questionnaire will be treated confidentially; names need not to be filled in, other identifiable information neither.
- 3.4 Please return this questionnaire, even if the annual accounts 1995 have not been approved yet or if some questions could not be answered.
- 3.5 For further support or clarifications, please contact:

Johan CHRISTIAENS
Tel. 09/264.35.33 or 052/22.13.64
Fax 09/264.35.88

PART I: OUTPUT MUNICIPAL
ACCOUNTING

I-1 Has the Municipal Council already received and enacted (art. 240, par. 1 NGW) the **Budgetary Account** and **Annual Accounts** as of 1995 (Balance Sheet, P/L Account and Notes)?

YES NO

☐	☐
--------------------------	--------------------------

If yes,

1/ What is the exact date of this enactment?

..	..	19..
----	----	------

2/ Please send us a copy of the **Budgetary Account** 1995 and **Annual Accounts** 1995 as well as of the **Beginning Balance Sheet** Jan. 1, 1995 or earlier (with preference for originals).

3/ Please send us a copy of the **Balance of Accounts** Dec. 31, 1995 if not included in the Annual Accounts.

If no,

1/ What will be the approximate date of enactment?

..	..	19..
----	----	------

2/ What are the main reasons for the delay?

--

I-2 Are there "ordinary" *Municipal Enterprises* ("regieën") related to your municipality?

YES NO

☐ ☐

If so, please list them hereafter:

NAME	ACTIVITY
...	...
...	...
...	...

I-3 Are there *Municipal Non-Profit Organizations* ("VZW's") (e.g. sport centres, swimming pool, etc.) related to your municipality? (Related means that the majority of the Board of Directors is member of the Municipal Council)

YES NO

☐ ☐

If so, please list them hereafter:

NAME	ACTIVITY
...	...
...	...
...	...

DEEL II: ACCOUNTING PRACTICES

II-1 What is the system of retirement financing (pension plan) since 1st January 1995?

	<u>Municipal servants</u>		<u>Mayor and Aldermen</u>	
	YES	NO	YES	NO
RSZPPO-contributions?	☐	☐	☐	☐
Contributions to an internal municipal pension fund?	☐	☐	☐	☐
Pensions at the expense of the municipality itself?	☐	☐	☐	☐
By external insurance (e.g. OMOB) or an external pension fund?	☐	☐	☐	☐

Comment:

II-2 Has the municipality an OCMW-hospital?

NO ☐

YES, not having losses at municipality's expense ☐

YES, having losses at municipality's expense ☐

In the last case: how is the OCMW-hospital's loss accounted for in the municipality's accounting system?

	YES	NO
The loss at municipality's expense is recorded when paid to the OCMW-hospital	☐	☐

The loss at municipality's expense is recorded as a provision (VI') when the loss has incurred	☐	☐
--	--------------------------	--------------------------

The loss at municipality's expense is recorded as a debt (VII' or VIII') when the loss has incurred ☐ ☐

Other accounting practice ☐ ☐
Comment:

II-3 Which existing **natures** of the **municipal patrimony** or relevant parts of natures have been **left out** in the beginning balance sheet 1st Jan. 1995 (or earlier if the municipality has started before 1995) and for what reason? (we do not mean the natures that should not be valued in the beginning balance sheet by virtue of art. 1 MD 1st Feb. 1994 like 233 Metalling, 341 Lifestock, ...)

Nature patrimony	Value (estimation)	Reason A, B, C or D
...		
...		
...		

A = Nature is property of an intermunicipal organization, a non-profit organization or an autonomous municipal enterprise
B = Nature belongs to a municipal enterprise ("regie")
C = Inventory and valuation not possible
D = Other reason; please comment

II-4 How many **shares Gemeentekrediet** does the municipality possess and what is the recorded unit price on 31th December 1995?

Number of shares

Recorded unit price?

YES NO

a) 10,000 BEF? ☐ ☐

b) 42,857 BEF? ☐ ☐

c) Other unit price?

II-5 What is normally the *de minimis* level in considering fixed assets?

	YES	NO
a) Up to 15,000 BEF?	☐	☐
b) Up to 50,000 BEF?	☐	☐
c) Other <i>de minimis</i> level?		...
d) It depends?	☐	☐
- Comment:

II-6 According to which accounting rule are **overhead invoices** (account group 61) at year end recognized as charges?

Does the attribution depend on:

a) Invoice date? (= the date printed by the supplier on the invoice); invoices dated 1995 are charged in 1995; invoices dated 1996 are charged in 1996.

YES NO

☐

☐

b) The date of receiving the invoice in the municipality, charging all invoices that have arrived in the period 1st Jan. 1996 to 15th Feb. 1996?

YES NO

☐

☐

c) The date at which the purchased goods and services were delivered irregarding the date of the invoice and the date of receiving the invoice neither? In other words, goods and services delivered in 1995 are all being charged in the accounting year 1995, goods and services delivered in 1996 are all being charged in 1996, whatever the invoice date might be.

YES NO

☐

☐

d) Other cut-off rule or combination of a), b), c)?

YES NO

☐☐

Comment:

II-7 Have the **salaries** of the **fixed appointed officials** for January 1996 been paid already in 1995?

YES NO

☐☐

If so, how were these staff costs recorded?

a) Charged in 1995 when paid, without deferral to 1996?

YES NO

☐☐

b) Charged in 1995 when paid, but deferred to 1996 using Deferral and accrual accounts (e.g. 4901)?

YES NO

☐☐

c) Charged in 1995 when paid, but deferred to 1996 using Debt accounts?

YES NO

☐☐

d) Other accounting practice?

YES NO

☐☐

Comment:

YES NO

□ □

YES NO

100

YES NO

100

YES NO

□ □

YES NO

PART III: ACCOUNTING BACKGROUND

III-1 The next questions are about the **Municipal Treasurer**, the **Municipal Secretary** and the **Municipal Officials** who were working for the Budgetary Account and the Financial Accounting for 1995. Please consider the part-time personnel as counting for a full person.

1/ Please fill in the number of persons according their highest degree of education.

NUMBER

Highschool (at least 4 years), University	
Highschool (2 or 3 years) (A1, B1, ...)	
Secondary, primary education (general, technical, professional, ...)	

2/ How many of these persons have an education:

NUMBER

Provincial Administration School?	
Other kinds of education?	
...	
...	

3/ How many of these persons are member of:

NUMBER

BIB (Professional Institute of Bookkeepers)?	
IDAC (Institute of Accountants)?	

4/ Do some of these persons have a preliminary business accounting experience?

YES NO

☐ ☐

If so, please fill in the previous business sector and the number of years of experience per person.
(names need not to be given at all):

Business sector	Years of experience
...	...
...	...

5/ Has the municipality taken care for training and education in the new municipal accounting for these persons?

YES NO

☐ ☐

If so, what kinds of training and for how many days?

Kind of Training	Days
...	...
...	...

III-2 Did your municipality have a relationship in 1995 with **external independent consultants** regarding the beginning balance sheet and the implementation of the new municipal accounting?

PERMANENT

ONCE-ONLY

YES NO

YES NO

Moore & Rowland?

☐ ☐

☐ ☐

Euraccounts?

☐ ☐

☐ ☐

Chartered Accountants?
(*)

☐ ☐

☐ ☐

Accountants IDAC(*)?

☐ ☐

☐ ☐

Others, who?

☐ ☐

☐ ☐

Comment:

(*) = others than Moore & Rowland and Euraccounts

III-3 What **software** system was the municipality applying in 1995 regarding the new municipal accounting?

	YES	NO
CEVI?	☐	☐
VLABRIC?	☐	☐
NV Schaubroeck?	☐	☐
CIPAL?	☐	☐
Others, who?	☐	☐
Comment:	☐	☐

If you have remarks or suggestions, please let us know (e.g. actual difficulties you encountered when setting up the first Balance Sheet, problems in setting up the Notes; link between budgetary accounting and financial accounting, likes & dislikes, ..., your wishes):

END OF THE QUESTIONNAIRE

WITH OUR COMPLIMENTS FOR YOUR COLLABORATION

Appendix VII.B Questionnaire (original Dutch version)

Dhr./ Mevr. ...
Gemeenteontvanger
...

Gent, 4 december 1996

Cc. College van Burgemeester en Schepenen

Betreft: Gemeenteboekhouding en jaarrekening 1995

Geachte Mevrouw / Heer ...,

In het kader van het **wetenschappelijk onderzoek nieuwe gemeentebuchhouding** hebben wij U op 20 november 1996 een vragenlijst toegestuurd.

Wij hebben echter nog geen antwoord kunnen ontvangen. Graag verzoeken wij U het vragenformulier in te vullen en samen met de **beginbalans** en jaarrekening 1995 terug te sturen, waarvoor onze oprechte appreciatie.

Wij waarborgen U de absolute vertrouwelijkheid van deze gegevens.

Gelieve ons een seintje te geven wanneer U de blanco vragenlijst opnieuw zou wensen te ontvangen.

Dit verzoek kan uiteraard als nietig worden beschouwd wanneer uw antwoorden ondertussen reeds werden verstuurd, waarvoor onze dank.

Met de meeste hoogachting,

Prof. Dr. E. De Lembre

J. Christiaens

Dhr./ Mevr. ...
Gemeenteontvanger
...

Gent, 20 november 1996

Cc. College van Burgemeester en Schepenen

Betreft: Gemeenteboekhouding en jaarrekening 1995

Geachte Mevrouw / Heer ...,

In de vakgroep Accountancy en Beheerscontrole, zijn wij o.l.v. Prof. Dr. E. De Lembre bezig met een **wetenschappelijk empirisch onderzoek naar de implementatie van de nieuwe gemeenteboekhouding**.

Met het oog op deze studie hadden wij graag op U een beroep gedaan. Wij stellen het ten zeerste op prijs indien U bijgevoegde vragenlijst wil beantwoorden en terugsturen; graag ontvangen wij ook een exemplaar van de beginbalans (de allereerste balans) en de jaarrekening per 31/12/95, waarvoor onze oprechte dank.

Wij waarborgen U de absolute vertrouwelijkheid van uw gegevens en zullen niet nalaten U de samengevoegde resultaten van deze studie kenbaar te maken (alleen niet-geïndividualiseerde resultaten worden bekendgemaakt zodat de vertrouwelijkheid kan worden gewaarborgd).

Nogmaals onze oprechte dank voor uw medewerking.

Met de meeste hoogachting,

Prof. Dr. E. De Lembre

J. Christiaens

Bijlagen: Vragenlijst Onderzoek Gemeenteboekhouding

VRAGENLIJST GEMEENTEBOEKHOUDING

gericht aan de
Gemeente-ontvanger

Gelieve dit formulier ingevuld terug te zenden samen met **beginbalans en jaarrekening 31/12/95 vóór 2 december 1996** naar:

UNIVERSITEIT GENT
Accountancy J. Christiaens
Hoveniersberg 4
9000 GENT

STAD/GEMEENTE:

Naam, voornaam:

Functie:

Telefoon:

GEBRUIKSAANWIJZING

1. DOELSTELLING VAN HET ONDERZOEK

Het ligt in de bedoeling om concrete gegevens te verzamelen over de invoering en uitwerking van de nieuwe gemeenteboekhouding, de wijze waarop de jaarrekening tot stand komt en de eventuele moeilijkheden die hierbij voorkomen.

Deze gegevens zullen zeer nuttig zijn om een totaalbeeld en suggesties te kunnen bekomen over de uitkomsten van de hervormde gemeenteboekhouding.

2. INHOUD

De gestelde vragen zijn onderverdeeld in 3 groepen, met name de rekeningen van de gemeente, de boekhoudpraktijken en de boekhoudkundige achtergrond.

3. VERDUIDELIJKINGEN BIJ HET INVULLEN EN TERUGSTUREN

- 3.1 Wanneer meerdere antwoorden mogelijk zijn, gelieve dan commentaar te geven.
- 3.2 Wanneer aantallen of uren worden gevraagd kan een aanvaardbare benadering volstaan.
- 3.3 De gegevens op deze vragenlijst worden vertrouwelijk behandeld; het is nergens nodig namen te vermelden, noch andere individualiseerbare informatie te verstrekken.
- 3.4 Gelieve deze vragenlijst zeker terug te sturen, zelfs wanneer de rekeningen 1995 nog niet zijn afgesloten of wanneer U niet alle vragen kunt beantwoorden.
- 3.5 Voor verdere commentaar over deze vragenlijst kunt U steeds terecht bij:

Johan CHRISTIAENS
Tel. 09/264.35.33 of 052/22.13.64
Fax 09/264.35.88

DEEL I: OUTPUT VAN DE GEMEENTE-
BOEKHOUDING

I-1 Heeft de Gemeenteraad reeds vergaderd om de rekeningen (begrotingsrekening, resultatenrekening en balans) van het dienstjaar 1995 vast te stellen (art. 240, par. 1 NGW)?

JA NEE

☐	☐
--------------------------	--------------------------

Indien ja,

1/ Wat is de datum van aanname van begrotingsrekening en jaarrekening door de Gemeenteraad (art. 240, par. 1 NGW)?

..	..	19..
----	----	------

2/ Gelieve ons een exemplaar van de Begrotingsrekening en Jaarrekening 1995, evenals van de eerste balans 1 jan., 1995 of de vroegere eerste balans op te sturen (met de voorkeur voor originelen aub).

3/ Gelieve ons ook een exemplaar van de Proef- en Saldi-balans per 31/12/95 te laten worden voor zover niet opgenomen bij de jaarrekening.

Indien nee,

1/ Wat zal de vermoedelijke datum van vastelling van de rekeningen door de Gemeenteraad zijn?

..	..	19..
----	----	------

2/ Welke zijn vermoedelijke redenen voor het uitstel?

--

I-2 Zijn er "gewone" Gemeentebedrijven (= Regieën) verbonden met uw gemeente (art. 261, par. 1 NGW)?

JA NEE

☐ ☐

Indien ja, welke?

NAAM	ACTIVITEIT
...	...
...	...
...	...

I-3 Zijn er Gemeentelijke VZW's waar de meerderheid van de Raad van Beheer deel uitmaakt van uw Gemeenteraad (bv. sportcentra, zwembad, cultureel centrum, ...)?

JA NEE

☐ ☐

Indien ja, welke?

NAAM	ACTIVITEIT
...	...
...	...
...	...

DEEL II: BOEKHOUDPRAKTIJKEN

II-1 Hoe ziet het systeem van pensioenfinanciering er in uw gemeente uit sedert januari 1995?

	<u>Gemeente- personeel</u>		<u>Burgemeester en Schepenen</u>	
	JA	NEE	JA	NEE
Via RSZPPO-bijdragen?	☐	☐	☐	☐
Bijdragen aan intern pensioen- fonds van de gemeente?	☐	☐	☐	☐
Pensioenen rechtstreeks ten laste van Gemeente zelf?	☐	☐	☐	☐
Via externe verzekering (bv. OMOB) of een extern pensioenfonds?	☐	☐	☐	☐

Commentaar:

II-2 Heeft de gemeente een OCMW-ziekenhuis?

NEE ☐

JA, zonder tekorten ten laste van de gemeente ☐

JA, met tekorten ten laste van de gemeente ☐

In dit laatste geval: hoe wordt het tekort van het OCMW-ziekenhuis door de gemeente geboekt?

	JA	NEE
Het tekort t.l.v. de gemeente wordt geboekt wanneer betaald aan het OCMW-ziekenhuis	☐	☐

	JA	NEE
Het tekort t.l.v. de gemeente wordt geboekt als voorziening (VI') wanneer het tekort bekend wordt	☐	☐

Het tekort t.l.v. de gemeente wordt geboekt
als schulden (VII' of VIII') wanneer het
tekort bekend wordt

☐ ☐

Andere boekhoudmethode

☐ ☐

Commentaar:

II-3 Welke bestaande aarden van het gemeentepatrimonium of belangrijke delen van aarden werden niet opgenomen in de beginbalans 1/1/95 (of vroeger indien de gemeente vóór 1995 is gestart) en om welke reden? (we bedoelen niet de aarden die ingevolge art. 1 MB 1/2/94 in de beginbalans geen waardebepaling krijgen zoals bv. 233 Slijtlaag, 341 Veestapel, ...)

Aard patrimonium	Waarde (benadering)	Reden A, B, C of D
...		
...		
...		

A = Aard is eigendom van een intercommunale, VZW of autonoom gemeentebedrijf

B = Aard behoort toe aan een regie ("gewoon" gemeentebedrijf)

C = Inventarisatie en waardebepaling was niet mogelijk

D = Andere reden; graag commentaar

II-4 Hoeveel aandelen Gemeentekrediet bezit de gemeente en tegen welke eenheidsprijs zijn ze geboekt per 31/12/95?

Aantal aandelen

Geboekte eenheidsprijs?

JA NEE

a) 10.000 BEF?

☐ ☐

b) 42.857 BEF?

☐ ☐

c) Andere?

...

II-5 Welk is normaal de minimum-drempel om een investering als vast actief te boeken?

	JA	NEE
a) Vanaf 15.000 BEF?	☐	☐
b) Vanaf 50.000 BEF?	☐	☐
c) Andere drempel?	...	
d) Hangt ervan af?	☐	☐
- Commentaar:

II-6 Volgens welke regel worden **aankoopfacturen** van 61 Exploitediensten en -goederen op het einde van het dienstjaar in de boekhouding als kosten geboekt?

Hangt de aanrekening af van:

a) Factuurdatum? (= datum door de leverancier afgedrukt op de factuur); facturen met datum 1995 worden in 1995 aangerekend; facturen met datum 1996 worden in 1996 aangerekend.

JA NEE

☐	☐
--------------------------	--------------------------

b) De datum wanneer de factuur ontvangen is in de gemeente, waarbij alle facturen ontvangen 1/1/96 - 15/2/96 worden aangerekend in 1995?

JA NEE

☐	☐
--------------------------	--------------------------

c) De datum waarop de goederen en diensten werden geleverd aan de gemeente afgezien van de factuurdatum en datum waarop de factuur werd ontvangen? M.a.w. goederen en diensten geleverd in 1995 worden allemaal aangerekend in dienstjaar 1995, goederen en diensten verstrekt in 1996 worden allemaal aangerekend in 1996, wat ook de factuurdatum was.

JA NEE

☐	☐
--------------------------	--------------------------

d) Andere afgrenzingsregel of combinatie van a), b), c)?

JA NEE

☐ ☐

Commentaar:

II-7 Werden de **salarissen** voor de maand januari 1996 van de **vastbenoemden** reeds betaald in 1995?

JA NEE

☐ ☐

Indien ja, hoe werden deze personeelskosten geboekt?

a) Aangerekend in 1995 wanneer ze werden betaald, zonder overdracht naar 1996?

JA NEE

☐ ☐

b) Aangerekend in 1995 wanneer ze werden betaald, maar uitgesteld naar 1996 via overlopende rekeningen (bv. 4901 Over te dragen kosten)?

JA NEE

☐ ☐

c) Aangerekend in 1995 wanneer ze werden betaald, maar uitgesteld naar 1996 via schuldrekeningen?

JA NEE

☐ ☐

d) Andere boekhoudkundige methode?

JA NEE

☐ ☐

Commentaar:

JA NEE

--

JA NEE

□ □

JA NEE

100

JA NEE

100

JA NEE

11

[illegible]

DEEL III: BOEKHOUDKUNDIGE
ACHTERGROND

III-1 Volgende vragen betreffen de Gemeente-ontvanger, de Gemeente-secretaris en de gemeentelijke medewerkers die actief betrokken zijn bij de begrotingsrekening en de algemene boekhouding van dienstjaar 1995. *Gelieve halftijdse personeelsleden te beschouwen als volledige persoon.*

1/ Gelieve het aantal personen aan te duiden volgens hoogst behaalde studieniveau:

	AANTAL
Hogeschool lange type, Universiteit	
Hogeschool korte type (A1, B1, Regentaat, ...)	
Secundair, lager (algemeen, technisch A2, A3, beroeps, ...)	

2/ Hoeveel van deze personen hebben een opleiding:

	AANTAL
Provinciale Bestuursschool?	
Andere vormen van onderwijs?	
...	
...	

3/ Hoeveel van deze personen hebben een lidmaatschap:

	AANTAL
Beroepsinstituut Boekhouders (BIB)?	
Instituut der Accountants (IDAC)?	

4/ Hebben sommige van deze personen een voorafgaande boekhoudkundige/administratieve bedrijfservaring?

JA NEE

☐☐

Indien ja, graag per persoon vorige bedrijfssector en aantal jaren ervaring (namen zijn zeker niet nodig):

Bedrijfssector	Jaren ervaring
...	...
...	...

5/ Heeft de gemeente voor deze personen gezorgd voor opleiding en training in de nieuwe gemeenteboekhouding?

JA NEE

☐ ☐

Indien ja, welke types van training en hoeveel dagen?

Type Training	Dagen
...	...
...	...

III-2 Deed uw gemeente voor dienstjaar 1995 beroep op **externe zelfstandige adviseurs** m.b.t. de beginbalans en uitvoering van de nieuwe gemeenteboekhouding?

	<u>PERMANENT</u>		<u>EENMALIG</u>	
	JA	NEE	JA	NEE
Moores & Rowland?	☐	☐	☐	☐
Euraccounts?	☐	☐	☐	☐
Bedrijfsrevisoren(*)?	☐	☐	☐	☐
Accountants IDAC(*)?	☐	☐	☐	☐
Anderen, wie?	☐	☐	☐	☐
Commentaar:				

(*) = andere dan Moores & Rowland en Euraccounts

III-3 Met welk systeem van **software** werkte de nieuwe gemeenteboekhouding in uw gemeente betreffende dienstjaar 1995?

	JA	NEE
CEVI?	☐	☐
VLABRIC?	☐	☐
NV Schaubroeck?	☐	☐
CIPAL?	☐	☐
Andere, wie?	☐	☐
Commentaar:		

Hebt U nog eventuele opmerkingen of wensen dan kunt U deze hierna formuleren (bv. uw belangrijkste concrete moeilijkheden bij het opstellen van de beginbalans; probleemgebieden bij het opmaken van de toelichting; koppeling begroting aan algemene boekhouding; zaken waar U het niet mee eens bent, ..., uw wensen hierbij):

EINDE VRAGENLIJST

MET ONZE OPRECHTE DANK VOOR UW MEDEWERKING!

Appendix VIII: Overview Accounting Output 1995

	Regulated by	Data N/A	Compliance	%
<hr/>				
OBLIGATORY OUTPUT				
Budgetary accounting				
Budgetary accounts	<i>NARGC</i>	0	95	95% (1)
Statement on deferred budgets and appropriations (Model T) (MOD11)	<i>BA/FB 96/3 2.</i>	7	48	51,6%
Decreed claims receivable (RECEIV)	<i>BA/FB 96/3 2.</i>	5	44	46,3%
Financial accounting				
Balance sheet	<i>MD 10th Jan. 1996</i>	0	95	95%
P/L account	<i>MD 10th Jan. 1996</i>	0	95	95%
Notes (= Model 14):	<i>MD 23th Sept. 1991</i>			
1. Valuation rules (VALRUL)		6	73	77,7%
2. Details and comments on balance sheet and P/L items				
Fixed assets movements schedule (MUTTAB)	<i>BA/FB 96/3 1.1</i>	9	64	70,3%
Redemption tables loans (COPLOA)	<i>BA/FB 96/3 1.3</i>	6	37	39,4%
Complete detail investments (DETINV)	<i>BA/FB 96/3 1.4</i>	6	54	57,4%
Detail cash at bank and in hand	<i>BA/FB 96/3 1.5</i>	see MOD15		
Capital gains/loss on disposal of fixed assets (REAFXA)	<i>BA/FB 96/3 1.6</i>	24	30	39,5% (2)
3. Contingencies, rights, commitments (CONTIN)		6	35	37,2%
4. Modifications valuation rules and disclosure				
Modifications initial capital (MODCAP)	<i>BA/FB 96/3 1.6</i> <i>Guidelines Nutt. 2.h</i>	6	73	77,7%
5. Comments and clarifications				
Statement 173X tax administration (ST173X)	<i>BA/FB 96/3 1.7</i>	6	32	34,0%
Statement cadastral revenues (CADINC)	<i>BA/FB 96/3 1.7</i>	6	33	35,1%
Trial balance (= Model 9) (TRIBAL)	<i>BA/FB 96/3 1.7</i>	5	69	72,6%
Detail accruals/deferrals (ACCDEF)	<i>BA/FB 96/3 1.7</i>	12	23	26,1%
Reconciliation budgetary accounting result with financial accounting result (BUCORE)	<i>Guidelines Nutt. 3.</i>	6	40	42,6%
Statement Cash at bank and in hand (Model 15)	<i>MD 10th Jan. 1996</i>			
Synthetic balance of general accounts (MOD15A)		6	42	44,7%
Detail financial accounts (MOD15BC)		6	56	59,6%
Synthetic and control table (MOD15D)		6	30	31,9%
Certification by Municipal Treasurer (art. 39 par 6 NARGC)(MOD15E)		6	49	52,1% (3)
Report of checking the cash (MOD15F)		6	19	20,2%

	<i>Regulated by</i>	<i>Data N/A</i>	<i>Compliance</i>	<i>%</i>
NOT EXPLICITLY OBLIGATORY OUTPUT				
* Other details balance sheet, P/L account				
III 25 Agreed investment subsidies; IV 27 Subsidy agreements and agreed loans (INVSUB)	—	6	64	68,1%
VII Amounts receivable within one year (DEBTOR)	—	6	61	64,9%
II' Capitalised results; III' P/L brought forward and IV' Reserves (NETWOR)	—	6	60	63,8%
V' Granted investment subsidies (VINVSU)	—	6	65	69,1%
VIII' Creditors, amounts falling due within one year; IX' Third parties (CREDOR)	—	6	62	66,0%
P/L account: costs (DETCO)	—	6	43	45,7%
P/L account: revenues (DETRE)	—	6	44	46,8%
* Technical issues				
Summary of budgetary result and accounting result (SYNBUD)	—	6	87	92,6%
Comparison of the budget with the budgetary accounts (BUDABU)	—	5	31	32,6%
* Understandability				
Comments on how to read and interpret the Financial Statements; theoretical overview of ratios (EDUREA)	—	6	74	78,7%
Analysis of the budgetary accounts, ratios, performance indicators, statistics (ANABUD)	—	5	37	38,9%
Analysis of the annual accounts, ratios, horizontal, vertical, statistics (ANAFIN)	—	6	72	76,6%
* Readability				
Pictorial, graphical presentation (PICGRA)	—	6	57	60,6%
Different colours of pages other than white (DIFCOL)	—	6	17	18,1%
Table of contents (TABCON)	—	6	31	33,0%
All pages consecutively numbered (PAGCON)	—	6	37	39,4% (4)
Disclosure of the balance sheet of prior year to the balance sheet of current year (ONEYE)	—	5	82	86,3%

(1) In a few municipalities the budgetary accounts are condensed.

(2) The data N/A consist of 18 municipalities which are not disclosing capital gains or loss on disposal of fixed assets in the P/L. Hence, they do not need to comment the item in the Notes.

(3) 49 municipalities are in compliance with the regulations, of which 13 have just disclosed a formalistic statement without figures.

(4) The other $100 - 6 - 37 = 57$ consist of 56 municipalities having the pages numbered partly in a consecutive way and 1 almost without page numbers.

Appendix IX: Fixed assets movements schedules

Practices	Acquisition cost				Movements during the year				Revaluation surpluses			
	Movements during the year				Movements during the year				Movements during the year			
	At the end of previous year	Acquisitions	Own work and capitalized maintenance	Equipment	For nothing	Sales and disposals (-)	Transfers from another (+) (-)	Other (+) (-)	At the end of previous year	Yearly recorded	Exceptionally recorded	Reversals
M&R	Y	Y	Y	-	Y	Y	Y	Y	Y	Y	Y	Y
EUR	Y	Y	-	Y	-	Y	Y	-	Y	Y	Y	Y
Ad hoc W1	Y	Y	-	Y	-	Y	Y	-	Y	Y	-	Y
Ad hoc 6	Y	Y	-	-	-	Y	-	-	Y	Y	-	-
Ad hoc A1	Y	Y	-	-	-	Y	-	-	Y	Y	-	-
Ad hoc 7	Y	Y	-	-	-	Y	-	-	Y	Y	-	Y
Ad hoc 2	-	Y	-	Y	-	Y	-	-	-	Y	-	-
Ad hoc A2	-	Y	-	Y	-	Y	Y	-	-	Y	-	-
Ad hoc 5	-	Y	-	-	-	Y	Y	-	-	Y	-	-
Ad hoc T	-	Y	-	-	-	Y	-	Y	-	Y	-	-
Ad hoc 3	-	Y	-	-	-	Y	-	-	-	Y	-	-
Ad hoc W2	Y	-	-	-	-	-	-	-	-	Y	-	-
Ad hoc S	-	-	-	-	-	-	-	-	-	Y	-	-

"Y" means that the item is foreseen in the fixed assets movements schedule of the municipality;
"-" means that the column is not foreseen in the movements schedule; this does not prevent the municipality from entering the movements together with another column.

	Depreciation and amounts written off Movements during the year					Transfers from one heading to another (+)(-)		Net book value	
	At the end of previous year	Yearly recorded	Recorded Extrao maint.	Exceptionally recorded	Reversals	one heading to another (+)(-)	At the end of the year	At the end of previous year	At the end of the year
Practices									
M&R	Y	Y	-	Y	Y	Y	Y	-	Y
EUR	Y	Y	Y	-	Y	Y	Y	Y	Y
Ad hoc W1	Y	Y	-	-	Y	Y	Y	Y	Y
Ad hoc 6	Y	Y	-	-	Y	-	Y	Y	Y
Ad hoc A1	Y	Y	-	-	Y	-	Y	Y	Y
Ad hoc 7	-	Y	-	-	Y	-	Y	Y	Y
Ad hoc 2	-	Y	-	-	Y	-	Y	Y	Y
Ad hoc A2	-	Y	-	-	-	-	Y	Y	Y
Ad hoc 5	-	Y	-	-	-	-	Y	Y	Y
Ad hoc T	-	Y	-	-	-	-	Y	Y	Y
Ad hoc 3	-	Y	-	-	-	-	Y	Y	Y
Ad hoc W2	-	Y	-	-	-	-	Y	Y	Y
Ad hoc S	-	Y	-	-	-	-	Y	Y	Y

Appendix X. Estimation of pension provisions

1/ Retired Mayor and Aldermen

Assumptions:

- every retired person has the age¹ of 65 (I) or 70 (II);
- every retired person is married and his wife/her husband has the same age; the portability rate is 50%;
- the annual pension payment is constant and monthly payable;
- engagements other than endowment, like decease, invalidity are not taken into account;
- the technical interest rate is 4.75% and the mortality tables are HFR 68-72.

Taking an example results in:

		<u>Factor²</u>	<u>Payment</u>	<u>Provision</u>
I	65	9.9976	7 mio	70.0 mio
II	70	8.7540	7 mio	61.3 mio

average = 65.7 mio BEF

2/ Appointed Mayor and Aldermen

Due to the lack of detailed information, just an arbitrary best (A) and worst (B) case is approached.

Assumptions:

- every working member of Mayor and Aldermen has the age of 35 (A), 65 (B) and respectively 5 (A), 35 (B) years of duty;
- the annual pension payment is constant and monthly payable;
- engagements other than endowment, like decease, invalidity are not taken into account;
- the technical interest rate is 4.75% and the mortality tables are HFR 68-72 and HD 68-72.

Formula: $\text{Provision} = \frac{\text{Years of duty}}{\text{Whole career}} * \text{Present value factor } R2^3 * \text{Payment} * \text{Capitalization factor } R1$

Best case (A):

Provision = $5/35 * 0.1893 * 7 \text{ mio} * 17.71$ male (or 18.35 female)

= 3.4 mio male (or 3.5 mio female)

Worst case (B):

Provision = $35/35 * 1 * 7 \text{ mio} * 9.99$ male (or 11.27 female)

= 70.0 mio male (or 78.8 mio female)

¹ The retirement starts at the age of 60 (Art. 4, para 1, Law Dec. 8, 1976).

² ABB, Tarief Levensverzekering, 1986.

³ Mortality tables, De minimumprovisie en de solvabiliteitsmarge van een pensioenfonds, ABB, 1987.

Appendix XI: Valuation rules Provisions for risks and charges

1. First balance sheet 1st January 1995 (or earlier for the experienced municipalities)

Euraccounts:

VI' Voorzieningen voor risico's en kosten: "Worden niet uitgedrukt op de beginbalans."

VI' Provisions for risks and charges: "Are not disclosed in the first balance sheet."

Moores & Rowland:

"De gemeente kan voorzieningen aanleggen voor risico's en kosten die zich in de toekomst zullen voordoen."

"The municipality can register provisions for risks and charges that will occur in the future."

VB Consultants:

"Het MB van 30 oktober 1990 voorziet voor deze balanspost geen waardebeoordeling."

"The MD of 30th October 1990 does not provide for a valuation for this balance sheet item."

Ad hoc 1a:

"Wanneer de fiscaliteit matig is en de begrotingsmiddelen toereikend zijn, dan kan de gemeenteraad kredieten op zijn begroting uittrekken om die middelen te bestemmen voor de vorming van fondsen voor risico's en lasten die in de loop van verscheidene dienstjaren invloed zouden kunnen hebben op het patrimonium. Aldus kan men een in de toekomst te verrichten uitgave in een bepaalde dienstjaar als kosten verdelen over diverse dienstjaren. De voorzieningen voor risico's en kosten worden niet uitgedrukt op de beginbalans."

"If taxation is moderate and budgetary means are sufficient, the Municipal Council can put aside budgets in order to fund provisions for risks and charges which might have an influence through different years on the patrimony. Hence, future expenditures occurring in a certain year can be allocated over several years. The provisions for risks and charges are not disclosed in the first balance sheet."

Ad hoc 2a:

"Voorzieningen zijn bedragen bestemd voor "waarschijnlijke" uitgaven in de toekomst."

"Provisions are amounts intended for "probable" expenditures in the future."

2. Annual accounts 31st December 1995

Moores & Rowland:

"De gemeente kan voorzieningen aanleggen voor bepaalde risico's en kosten. Deze voorzieningen kunnen enkel betrekking hebben op uitgaven van de gewone dienst."

"The municipality can register provisions for certain risks and charges. These provisions can only relate to expenditures of the ordinary service."

Ad hoc 1b:

Voorzieningen

"Voor (naam gemeente) (nog) niet van toepassing."

Provisions

"For (name of the municipality) not (yet) applicable."

Ad hoc 2b:

"De Gemeente kan voorzieningen aanleggen voor risico's en kosten die zich in de toekomst zullen voordoen. Een voorziening mag enkel worden aangelegd voor het dekken van een uitgave of kost die waarschijnlijk is, of die zeker is maar waarvan het totaal slechts kan geraamd worden. De gemeente (naam gemeente) maakt van deze mogelijkheid nog geen gebruik."

"The municipality can register provisions for risks and charges which will occur in the future. A provision may only be recorded to cover an expenditure or either a likely cost or a certain cost, but for an amount which has to be estimated. The municipality (name of the municipality) has not yet used this possibility."

Appendix XII: Valuation rules Accruals and deferrals

1. First Balance Sheet 1st January 1995 (or earlier for the experienced municipalities)

Euraccounts:

"Deze balanspost zal gebruikt worden voor eventuele niet toegewezen verrichtingen (de wachtrekeningen) en voor correcties die zich tijdens de eindejaarsverrichtingen zullen voordoen met betrekking tot toerekening van opbrengsten en kosten tot de periode."

"This balance sheet item will be applied for possible non-attributed transactions (suspense accounts) and for adjustments which will occur during the year end activities regarding the matching of costs and revenues to the financial year."

Moores & Rowland:

Actief: "Onder deze rubriek komen onder meer de kosten over te dragen naar het volgend dienstjaar, het bedrag van te identificeren betalingen en de voorschotten op leningsinteressen."

Passief: "In deze post komen onder meer de opbrengsten die betrekking hebben op een volgend dienstjaar en het terug te betalen bedrag van ten onrechte ontvangen sommen."

Assets-side: "This balance sheet item contains amongst others charges deferred to the next financial year, payments to identify and prepayments of interests."

Liabilities-side: "This balance sheet item contains amongst others revenues regarding the next financial year and repayable amounts improperly received."

Ad hoc 1A:

Actief: "Deze balanspost zal in de toekomst gebruikt worden voor eventuele niet-toegewezen verrichtingen en voor correcties in verband met de berekening van de resultatenrekening (kosten en opbrengsten) tijdens de eindejaarsverrichtingen."

Passief: "Deze balanspost zal in de toekomst gebruikt worden voor eventuele niet-toegewezen verrichtingen (wachtrekeningen) en voor correcties tijdens de eindejaarsverrichtingen met betrekking tot de toerekening van opbrengsten en kosten."

Assets-side: "This balance sheet item will be used in the future for possible non-attributed transactions and for adjustments regarding the calculation of the P/L account (costs and revenues) during the year end activities."

Liabilities-side: "This balance sheet item will be used in the future for possible non-attributed transactions (suspense accounts) and for adjustments during the year end activities"

regarding the attribution of revenues and costs."

Ad hoc 2A:

Actief: "Naast de kosten betreffende het volgend dienstjaar, bevindt zich onder deze post het bedrag van de reeds ontvangen facturen, die de budgetverantwoordelijken nog niet hebben gevisieerd en die de ontvanger bijgevolg nog niet heeft kunnen aanrekenen."

Passief: "In deze post komen onder meer de opbrengsten betreffende het volgend dienstjaar en het terug te betalen bedrag van ten onrechte ontvangen sommen."

Assets-side: "Apart from the costs regarding the next financial year this item contains all received invoices which have not been approved yet by those responsible for the budget and which consequently have not been charged by the Municipal Treasurer."

Liabilities-side: "This item contains amongst others revenues regarding the next financial year and repayable amounts received improperly."

Ad hoc 3A:

Actief: "Te identificeren betalingen."

Passief: "Te ventileren inningen."

Assets-side: "Payments to be identified."

Liabilities-side: "Receipts to be allocated."

Ad hoc 4A:

Actief: "Onder deze rubriek worden diverse kosten (nader te identificeren of over te dragen naar een volgend dienstjaar) voorlopig ingeschreven. Voor de beginbalans dienden geen dergelijke kosten geboekt te worden."

Passief: "In deze rubriek worden enerzijds opgenomen de kosten die betrekking hebben op het dienstjaar 1994 en dewelke betaald werden in 1995 en anderzijds de over te dragen ontvangsten 1994 maar die betrekking hebben op 1995."

Assets-side: "In this balance sheet item various costs (to be identified or to be deferred to the next financial year) are registered provisionary. For the first balance sheet there were no such costs to be registered."

Liabilities-side: "On the one hand the costs regarding the financial year 1994 which were paid in 1995 are included in this balance sheet item; on the other hand are included the deferred receipts 1994 but being related to 1995."

Ad hoc 5A:

Passief: "Deze post bevat ontvangsten van andere dienstjaren zijnde een huuropbrengst van 1995 die reeds in 1994 werd ontvangen."

Liabilities-side: "This item contains receipts of other financial years, i.e. a rent revenue of 1995 which was already received in 1994."

Ad hoc 6A:

Actief: "Het betreft kosten die gedaan werden in 1994, maar betrekking hebben op 1995. Na opening van de balansrekeningen 1995 worden deze kosten overgeboekt naar 1995."

Passief: "Het betreft ontvangsten gedaan in 1994, maar die geboekt worden in 1995."

Assets-side: "This item concerns costs occurred in 1994 but realised in 1995. After opening the balance sheet accounts 1995 these costs are going to be transferred to 1995."

Liabilities-side: "This item concerns receipts occurred in 1994, but recorded in 1995."

Ad hoc 7A:

Actief: "Vervroegde betalingen interesten."

Passief: "Nominale waarde."

Assets-side: "Prepayments of interests."

Liabilities-side: "Nominal value."

2. Annual accounts 31st December 1995

Moores & Rowland:

Idem 1st January 1995

Ad hoc 1B:

Idem 1st January 1995

Ad hoc 2B:

Idem 1st January 1995

Ad hoc 3B:

Idem 1st January 1995

Ad hoc 4B:

The defined accrual and deferral accounts 4901, 4902, 4903, 4904 are literally the same as those in business accounting. The defined accrual and deferral accounts 494, 497, 499 are the same as those defined by NARGC.

Ad hoc 5B:

Actief: "Niet van toepassing."

Passief: "Niet van toepassing."

Assets-side: "Not applicable."

Liabilities-side: "Not applicable."

Ad hoc 6B:

Actief: "Facturen in fase nazicht en vervroegde afbetaling lening."

Passief: "Nog te betalen kosten; over te dragen opbrengsten."

Assets-side: "Invoices being checked and prepayments of redemptions."

Liabilities-side: "Costs payable; deferred income."

Appendix XIII. List of natures to reevaluate

(art. 4 MD 30th October 1990, modified by MD 1st February 1994)

(in numerical order)

No.	Rate	Nature
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201	OPC	Farmer's land
202	OPC	Vacant building land
203	OPC	Industrial estate
205	OPC	Parks, gardens, cimetaryies, sport parks and recreation areas
206	OPC	Woodland and nature reserves
209	OPC	Other vacant sites
211	OPC	Land of buildings
212	ABEX	Office buildings
213	ABEX	Education buildings
214	ABEX	Industrial buildings and buildings for exploitation
215	ABEX	Buildings for culture, sports and religion
218	ABEX	Buildings not valued and without destination
219	ABEX	Other buildings
231	OPC	Land of roads
241	OPC	Land of constructions
261	OPC	Land of watercourses and rivers
621	ABEX	Buildings in leasing

Appendix XIV: Working paper revaluation

OPC					3,421%	
Land	1-1-95 Book value	31-12-95 Revaluation	Checked	Revaluation Check	Internal rate	Explanation
201	7.339.900	250.906	251.085	179	3,418%	
202	66.318.529	661.554	2.268.644	1.607.090	0,998%	Disposal & unexplainable
203	31.210.298	862.325	1.067.651	205.326	2,763%	Disposal & unexplainable
205	4.514.850	154.337	154.445	108	3,418%	
206	772.144	26.395	26.414	19	3,418%	
209	15.077.618	515.410	515.780	370	3,418%	
211	71.386.850	2.438.467	2.442.023	3.556	3,416%	Disposal
231	54.740.384	1.867.594	1.872.575	4.981	3,412%	Disposal
241	0	0	0	0		
261	18	0	1	1	0,000%	
Buildings	Book value	Reval.	Check		Internal rate	Explanation
212	11.593.381	151.878	151.878	0	1,310%	
213	40.515.343	530.768	530.769	1	1,310%	
214	62.244.829	815.434	815.434	0	1,310%	
215	374.993.061	4.912.572	4.912.573	1	1,310%	
218	0	0	0	0		
219	47.795.112	626.137	626.137	0	1,310%	
		13.813.777	15.635.409			
76120		13.813.777				
Account difference:		0				
Check difference:			(1.821.632)	1.821.633		
		0,00%	-13,19%	13,19%		

Appendix XV. Univariate correlation coefficients

* * * * MULTIPLE REGRESSION SPSS * * * *

Correlation, 1-tailed Sig:

	CI	BIB	CONSU	DEBTPC	EXBUSDIC	EXPERI	GEWONTV	ORMNFPO
CI	1,000 ,	-,038 ,356	,368 ,000	,201 ,026	-,037 ,360	,209 ,022	-,123 ,118	-,027 ,400
BIB	-,038 ,356	1,000 ,	,035 ,367	,116 ,132	,074 ,240	-,054 ,304	-,074 ,239	,039 ,355
CONSU	,368 ,000	,035 ,367	1,000 ,	,068 ,257	-,194 ,031	-,083 ,214	,039 ,353	-,109 ,148
DEBTPC	,201 ,026	,116 ,132	,068 ,257	1,000 ,	,163 ,058	,172 ,048	-,032 ,378	,279 ,003
EXBUSDIC	-,037 ,360	,074 ,240	-,194 ,031	,163 ,058	1,000 ,	,071 ,249	-,193 ,031	,212 ,020
EXPERI	,209 ,022	-,054 ,304	-,083 ,214	,172 ,048	,071 ,249	1,000 ,	-,101 ,167	-,007 ,475
GEWONTV	-,123 ,118	-,074 ,239	,039 ,353	-,032 ,378	-,193 ,031	-,101 ,167	1,000 ,	-,059 ,286
ORMNFPO	-,027 ,400	,039 ,355	-,109 ,148	,279 ,003	,212 ,020	-,007 ,475	-,059 ,286	1,000 ,
OWNREV	,236 ,011	,020 ,423	,177 ,044	,434 ,000	,075 ,236	,271 ,004	-,069 ,256	,364 ,000
POPUL	,264 ,005	,132 ,103	,088 ,199	,257 ,006	,208 ,022	-,027 ,398	-,234 ,012	,283 ,003
PROVSTAF	,159 ,064	-,127 ,111	-,186 ,037	-,071 ,249	-,020 ,426	,058 ,290	,030 ,388	-,061 ,279
STAFF	-,095 ,181	-,152 ,071	-,015 ,444	-,137 ,094	,000 ,499	-,150 ,075	,305 ,001	-,061 ,281
TRAIN	,175 ,046	,059 ,286	-,128 ,109	,122 ,120	,110 ,146	,146 ,080	,048 ,322	-,010 ,461

Appendix XV. Univariate correlation coefficients (continued)

	* * * * MULTIPLE REGRESSION SPSS * * * *				
	OWNREV	POPUL	PROVSTAF	STAFF	TRAIN
CI	,236 ,011	,264 ,005	,159 ,064	-,095 ,181	,175 ,046
BIB	,020 ,423	,132 ,103	-,127 ,111	-,152 ,071	,059 ,286
CONSU	,177 ,044	,088 ,199	-,186 ,037	-,015 ,444	-,128 ,109
DEBTPC	,434 ,000	,257 ,006	-,071 ,249	-,137 ,094	,122 ,120
EXBUSDIC	,075 ,236	,208 ,022	-,020 ,426	,000 ,499	,110 ,146
EXPERI	,271 ,004	-,027 ,398	,058 ,290	-,150 ,075	,146 ,080
GEWONTV	-,069 ,256	-,234 ,012	,030 ,388	,305 ,001	,048 ,322
ORMNFPO	,364 ,000	,283 ,003	-,061 ,279	-,061 ,281	-,010 ,461
OWNREV	1,000 ,	,221 ,016	-,062 ,277	,023 ,413	,055 ,299
POPUL	,221 ,016	1,000 ,	-,116 ,133	-,166 ,055	-,047 ,326
PROVSTAF	-,062 ,277	-,116 ,133	1,000 ,	-,090 ,194	,122 ,120
STAFF	,023 ,413	-,166 ,055	-,090 ,194	1,000 ,	-,122 ,121
TRAIN	,055 ,299	-,047 ,326	,122 ,120	-,122 ,121	1,000 ,

App.XVI: Normal P-P Plot of Stand. Residual
Dep. var. : Compliance index

App. XVI: Scatterplot

Dep. var.: Compliance index

Appendix XVIII. Calculation C-indices

* Valuation practice 205 *Land of parks, gardens, ...*

$$\text{C-index: } (6^2 + 57^2 + 2^2 - 65) / (65^2 - 65) = 77.5\%$$

* Valuation practice 231 *Land of roads*

$$\text{C-index: } (14^2 + 56^2 + 2^2 - 72) / (72^2 - 72) = 63.8\%$$

* Valuation practice 241 *Land of constructions*

$$\text{C-index: } (4^2 + 5^2 + 1^2 + 53^2 + 12^2 - 75) / (75^2 - 75) = 52.6\%$$

* Valuation practice 261 *Land of watercourses*

$$\text{C-index: } (11^2 + 44^2 + 2^2 + 1^2 + 9^2 - 67) / (67^2 - 67) = 46.9\%$$

* Valuation practice 211 *Land of buildings*

$$\text{C-index: } (8^2 + 44^2 + 14^2 + 4^2 - 70) / (70^2 - 70) = 44.3\%$$

* Valuation practices 21X *Buildings*

$$\text{C-index: } (12^2 + 14^2 + 1^2 + 2^2 + 23^2 + 1^2 + 14^2 + 2^2 - 69) / (69^2 - 69) = 21.5\%$$

* Valuation practices 235 *Sewers*

$$\text{C-index: } (10^2 + 50^2 + 5^2 + 2^2 + 3^2 - 70) / (70^2 - 70) = 53.2\%$$

* Valuation practices 236 *Waterpipes*

$$\text{C-index: } (4^2 + 2^2 + 2^2 + 1^2 + 2^2 + 5^2 + 60^2 - 76) / (76^2 - 76) = 62.8\%$$

* Valuation practices 237 *Other networks*

$$\text{C-index: } (2^2 + 2^2 + 2^2 + 1^2 + 1^2 + 4^2 + 63^2 - 75) / (75^2 - 75) = 70.7\%$$

* *De minimis* level general

$$\text{C-index: } (13^2 + 14^2 + 20^2 + 3^2 + 1^2 + 1^2 + 6^2 + 15^2 + 7^2 + 4^2 + 2^2 + 3^2 + 3^2 + 3^2 + 1^2 - 96) / (96^2 - 96) = 11.4\%$$

* *De minimis* non-experienced

$$\text{C-index: } (13^2 + 14^2 + 19^2 + 3^2 + 4^2 + 14^2 + 4^2 + 3^2 + 2^2 + 3^2 + 3^2 + 3^2 + 1^2 - 86) / (86^2 - 86) = 12.6\%$$

* *De minimis* experienced

$$\text{C-index: } (1^2 + 1^2 + 1^2 + 2^2 + 1^2 + 3^2 + 1^2 - 10) / (10^2 - 10) = 8.9\%$$

* Fixed assets movements schedule

$$\text{C-index: non-experienced: } (12^2 + 2^2 + 6^2 + 1^2 + 19^2 + 14^2 + 1^2 + 1^2 + 1^2 + 1^2 + 6^2 + 6^2 + 5^2 + 1^2 + 3^2 - 80) / (80^2 - 80) = 12.2\%$$

$$\text{C-index: experienced: } (2^2 + 1^2 + 3^2 + 2^2 + 1^2 + 1^2 + 1^2 - 11) / (11^2 - 11) = 9.1\%$$

* Art patrimony

$$\text{C-index: } (19^2 + 18^2 + 4^2 + 1^2 + 6^2 + 4^2 + 3^2 - 55) / (55^2 - 55) = 23.8\%$$

* Valuation shares Gemeentekrediet

C-index: $(16^2 + 77^2 + 1^2 + 1^2 + 1^2 + 1^2 - 97) / (97^2 - 97) = 65.4\%$

* Stocks

C-index: $(94^2 + 1^2 - 95) / (95^2 - 95) = 97.9\%$

* Accruals/deferrals other than suspense accounts

C-index: $(29^2 + 66^2 - 95) / (95^2 - 95) = 57.1\%$

* Accruals/deferrals: comments in the Notes

C-index: $(23^2 + 6^2 + 59^2 - 94) / (94^2 - 94) = 45.2\%$

* Cut-off problems

C-index: $(45^2 + 12^2 + 11^2 + 2^2 + 3^2 + 1^2 + 1^2 + 2^2 + 4^2 + 2^2 + 2^2 + 3^2 + 4^2 + 3^2 - 95) / (95^2 - 95) = 25.4\%$

* Pension provisions

C-index: $(7^2 + 89^2 - 96) / (96^2 - 96) = 86.3\%$

* Provisions for risks and charges (other than pensions)

C-index: $(94^2 + 1^2 - 95) / (95^2 - 95) = 97.9\%$

* Contingencies

C-index: $(59^2 + 35^2 - 94) / (94^2 - 94) = 52.8\%$

* Prepayments on dividends

C-index: $(63^2 + 1^2 + 5^2 + 29^2 - 98) / (98^2 - 98) = 49.8\%$

The 29 municipalities which have not prepaid the salaries at the end of December 1995 form another accounting practice which is not comparable with the three preceding.

Boxplot compliance index