

**DEVELOPING CAMERAL ACCOUNTING:**  
**an empirical example**

by

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# Developing Cameral Accounting: an empirical example

Cameral accounting has played an important historical role in governmental accounting in many countries, particularly in continental European countries, and arguments for developing cameral accounting have been presented. Given the fact, however, that the current international research literature on governmental accounting reports on no attempts to develop cameral accounting, the purpose of the article is to report on such an attempt. Hopefully, this article presenting an empirical example of the development of cameral accounting will provide useful insight adding to the insight provided by the great number of studies focusing on the introduction of commercial accounting in the governmental sector, thus providing us with a better platform on which to base a general discussion about whether to use cameral or commercial accounting in the governmental sector.

## Introduction

Historically, both in the business and governmental sectors only cash inflows and cash outflows were entered in the accounting system, relying on use of the single-entry bookkeeping method. For example, according to Tom Lee:

“Cash flow accounting is the oldest form of monetary accounting, preceding the now conventional accrual and allocation-based accounting (Winjum, 1972).” (Lee, 1986: introduction)

Over the ages, however, bookkeeping both in the business and governmental sectors has developed, although in different ways. Within the business sector, double-entry emerged in response to the needs of businessmen in Italy in the thirteenth century (Kam, 1990: 29), and Luca Pacioli’s book *Summa de Arithmetica Geometrica Proportioni et Proportionalita* („Review of Arithmetic, Geometry and Proportions”) in 1494 was the first book on double-entry bookkeeping to be published. In English the concept “commercial accounting” is often used when referring to this particular accounting model, and *Collins Cobuild English Language Dictionary* (1987: 277) defines “commerce” as “the activities and procedures involved in buying and selling things”; a definition which underlines the fact that the merchant’s double-entry bookkeeping method was developed for use by merchants involved in commercial activities, and the bookkeeping is carried out on the merchant’s double-sided account (debit and credit sides).

Historically, in the governmental sector another bookkeeping method has been used. In many countries, especially in continental Europe (particularly Austria, Germany and Switzerland; see e.g., Buschor, 1994; Mülhaupt, 1987; Walb, 1926), the cameralist’s - and not the merchant’s - bookkeeping method has been used. For example, Ernst Walb

(1926: 210) points out that the Latin word «camara» or «camera» in the 9th century denoted the place where the master stored his treasures, and the German expression «Kammer» in this connection denoted the room where those persons, who were responsible for administering the revenues, used to assemble. The expressions cameralistics and cameral accounting are for that reason since the earliest time closely linked both to money and revenue and their administration. Consequently, the expression “cameral accounting” underlines the fact that this particular accounting model has been used by governmental organizations, like municipalities, which are involved in the management of public (tax) money, as opposed to commercial activities in the form of buying and selling things. Moreover, the cameral bookkeeping method is a developed version of the single-entry bookkeeping method, and the bookkeeping is carried out on the cameral single-sided account (see the section “Cameral accounting” below for further details).

The vast majority of the current international literature on governmental accounting uses commercial accounting as its framework for analysis (see e.g. articles in the following volumes: Buschor and Schedler, 1994; Caperchione and Mussari, 2000). Moreover, the Public Sector Committee of the IFAC runs a standard setting project, developing International Public Sector Accounting Standards (IPSAS) based largely on the International Accounting Standards (IAS); consequently, the IPSAS are developed within the framework of commercial (accrual) accounting. On the other hand, there are only a few references to cameral accounting in the international accounting literature (see particularly Monsen, 2001a, 2002). However, given the fact that cameral accounting has played an important historical role in the governmental sector (see e.g., Walb, 1926; Monsen, 2002), Monsen (2002) argues that it is also of interest to refer to cameral accounting experiences in our attempts to develop governmental accounting. Moreover, the following observations about earlier attempts of replacing cameral accounting with commercial accounting, which have been reported by Ernst Walb (1926) in his classical book comparing commercial and cameral accounting, strengthen this argument:

Referring to the period 1500-1750:

«The introduction of commercial accounting in the total public sector was only an intermezzo. It had to fail, because one had not shown sufficient consideration for the special demands, which the state sector makes on an accounting system. One could not remove the disparities totally in the way that had been chosen; rather one had to develop the existing accounting system (i.e., the cameral accounting system).» (Walb, 1926: 215; translation from German)

Referring to the period after 1910:

«It is instructive to ascertain that one here once more recommended the same way as one had recommended 150 years earlier and partly also followed, namely the introduction of commercial accounting, even though also this time one limited oneself to the public enterprises. Further it is instructive to observe, that also this time this way turned out not to be the correct one. Where one had followed this way, one has partly left it again (Kieler Werft) or considers it not to be too favourable (Bayerische Staatsverwaltung).» (Walb, 1926: 224; translation from German)

«The latest development (of the cameral bookkeeping method) is therefore forced to follow the same way as the one followed after the first crisis, namely further development of the existing (i.e., the cameral) bookkeeping method.» (Walb, 1926: 224; translation from German)

Finally, referring another well-known German scholar, Rudolf Johns (1951), who also discusses cameral and commercial accounting, we learn that:

«(a)ttempts to introduce the commercial bookkeeping method in the state administration has always failed.» (Johns, 1951: 9; translation from German)

This means that these classical German works comparing the use of cameral and commercial accounting in the governmental sector (also see Mülhaupt, 1987; Wysocki, 1965), argue for further development of cameral accounting, as opposed to replacing it with commercial accounting. Given the fact, however, that the current international research literature on governmental accounting reports on no attempts to develop cameral accounting, the purpose of this article is to report on such an attempt. It is underlined that the purpose of the article is not to question the arguments for introducing commercial accounting in the governmental sector, neither is the purpose to compare the use of cameral and commercial accounting in this sector. However, after having prepared this article on the development of cameral accounting, we will have a better platform on which to base a general discussion about whether to use cameral or commercial accounting in the governmental sector. Hence, hopefully this one article on the development of cameral accounting will provide useful insight adding to the insight provided by the great number of studies focusing on the introduction of commercial accounting in the governmental sector.

The article is structured as follows: First, an introduction to cameral accounting is given, followed by a presentation of an empirical research project, focusing on the development of a new financial statement. Thereafter, this financial statement is discussed based on a cameral accounting perspective, and a concluding section ends the article.

## **Cameral accounting**

Cameral accounting (*administrative cameralistics*) was developed in the sixteenth century and onwards in order to contribute to increased control of public money in the core administration of the governmental organization (see e.g., Monsen, 2002). Walb (1926) points out that the development of cameral accounting can be divided into four different phases. In general terms, he argues that in practice the development of cameral accounting parallels that of commercial accounting (see also Oettle, 1990). It was devised as an internal auditing aid for royal financial administration (property administration, treasury administration) which originally consisted of varying and not very systematic continuous cash moveable holdings (continuous updating, chain entries, entries in stock records).

In the first phase (1500-1750), referred to as *simple cameral bookkeeping*, the focus was on showing money revenues and money expenditures, before, in the second phase (1750-1810), *current due* accounting was introduced. The term current dues refers to the fact that not only realized revenues and expenditures (i.e., cash or «actuals» accounting) were reported in the accounting system, but also future revenues and expenditures (i.e., current due accounting). The third development phase of cameral accounting (from 1810) took place in silence, and is referred to as *further grouping of the cameral bookkeeping transactions*. It consisted first and foremost of a systematic grouping of the cameral ledger. By help of this grouping the way was cleared for the preparation of an income statement in accordance with commercial (accrual) accounting.

The fourth development phase started about 1910, and consisted of developing administrative cameralistics to *enterprise cameralistics*. Particularly, in 1926 Ernst Walb worked out his basic theory about «Performance Result Accounting» (i.e., accrual accounting information), where he liberated cameral accounting from misunderstandings that had arisen because it had developed without any standard or theoretical interpretation (Oettle, 1990). He also demonstrated that cameral accounting applied in enterprises (i.e., enterprise cameralistics) is based on the same essential system as the commercial profit and loss accounts.

Commercial profit and loss accounts and enterprise cameralist accounts both measure performance based on economic efficiency in so far as they, in the first place, attempt to establish profit and loss principally as resulting from an enterprise's production of goods and services and their distribution. Accounting for compliance with

budget appropriations (public budget accounting or administrative cameralistics) in contrast is, like commercial single-entry bookkeeping, related to an organization's financial management (Oettle, 1990).

Within cameral accounting the concepts used are revenues and expenditures and the cameral account deviates strongly from the commercial account:

«In contrast with the two sides of the account within commercial accounting, the cameral account as a general rule is single-sided, i.e., it has either a revenue or an expenditure side. While the commercial account on each side (i.e., on the debit and credit sides) is single-sided, i.e., it has only one column, the cameral account consists in principle of four different columns (both on the revenue and expenditure sides).» (Mülhaupt, 1987: 95; translation from German)

The cameral account is shown in Table 1, and Johns (1951) refers to it as an account structure, because it combines different types of accounts.

	Revenues				Expenditures			
	Rests or residual dues b/f (RD)	Current dues (CD)	Actuals (A)	Rests or residual dues c/f (R)	Rests or residual dues b/f (RD)	Current dues (CD)	Actuals (A)	Rests or residual dues c/f (R)
Bookkeeping place								

**Table 1:** The cameral account structure.

The cameral account structure consists of two sides: *Revenues* and *Expenditures*. It is single-sided in the sense that the transactions are entered *either* on the revenues side *or* on the expenditures side. On each side, the cameral account structure consists of the following four different columns: *Rests or residual dues brought forward (RD)*, *Current dues (CD)*, *Actuals (A)* and *Rests or residual dues carried forward (R)*. Mülhaupt (1987) comments:

«In summary it can be stated that governmental accounting consists of revenues and expenditures. In this accounting system one not only registers payment transactions by help of the concepts of revenues and expenditures, but also credit transactions, result transactions, as well as balances and balance changes. The use of the concepts of revenues and expenditures for the various accounting transactions and for the closing of the accounts, is only possible in connection with the cameral system which consists of columns for current dues, actuals and rests, where the bookkeeping of the revenues and expenditures acquire different meanings depending on their placing in this system.» (Mülhaupt, 1987: 77-79; translation from German)

The cameral account structure, as shown in Table 1, is used both by administrative and enterprise cameralistics, although the former type does not use the full potential of the four different columns, such as what is done by enterprise cameralistics. Since the focus

in this article will be on the development of a financial statement for the core administration of a local government, the following discussion will be limited to administrative cameralistics. However, further details in English on enterprise cameralistics, may be found in Monsen (2002).

The column *Rests or residual dues brought forward (RD)* shows the amounts brought forward from previous periods. On the revenues side outstanding claims are shown, and on the expenditures side obligations are shown. The RD-columns thus constitute balance sheet columns at the beginning of the period, because outstanding amounts from the previous period here are brought forward as incoming amounts in the following period. Within administrative cameralistics, the column *Current dues (CD)* shows the new claims (i.e., revenues) on the revenues side and the new obligations (i.e., expenditures) on the expenditures side. The column *Actuals (A)* has a double task: First, it is a settlement account for the rests brought forward (RD) and/or current dues (CD), by showing how much of the rests/current dues that have been realized in terms of incoming or outgoing payments. Second, when we study the column vertically, it shows the incoming payments (cash inflows) on the revenues side and outgoing payments (cash outflows) on the expenditures side. Thus, this column corresponds to the accounts within commercial accounting that record the cash transactions, that is, the cash and bank accounts.

The column *Rests or residual dues carried forward (R)* shows how much of the dues (i.e., RD+CD), which are not yet realized in terms of payments. This column thus shows outstanding claims on the revenues side and outstanding obligations on the expenditures side at the end of the accounting period. This means that this column constitutes a balance sheet account, where the amounts in this column are carried forward to the RD-column for the following period.

According to the cameral bookkeeping rules, a transaction in the *Actuals* column cannot be undertaken without a simultaneous or previous transaction in the *Current dues* column. This requirement is related to the general rule in the public sector, saying that no money can be received or paid by an organizational unit (e.g., the municipal cashier), without a previous or simultaneous instruction to do so issued by another organizational unit (e.g., the chief municipal administrative officer). Moreover, the connection between the four different columns in the cameral account structure, is reflected in the cameral basic balancing rule, which applies both to the revenues and expenditures sides:

Rests or residual dues carried forward = Rests or residual dues brought forward +  
Current dues - Actuals

$$R = RD + CD - A$$

This means that the transactions within the cameral bookkeeping method, as already pointed out above, are reported horizontally on one side, i.e., *either* on the revenues side *or* on the expenditures side, and the axiom of single-entry bookkeeping is used. This separates this bookkeeping method strongly from the commercial bookkeeping method, which always uses two sides, i.e., both the debit *and* credit sides, and is based on the axiom of double-entry bookkeeping. Even though the axiom of single-entry bookkeeping is used, unlike commercial accounting with its two entries (debit and credit entries), there is no standard number of entries for each individual type of transaction within cameral accounting (see e.g., Oettle, 1990; Monsen, 2002).

As pointed out above, the cameral bookkeeping method was primarily developed for the core governmental administration (administrative cameralistics), where one to an essential degree deals with revenues and expenditures in the form of payments. Mülhaupt (1987) underlines in this connection:

«The special mark of the cameralistics, which means that the cash account goes through all the other accounts in form of the column *Actuals*, makes it possible in a simple and accurate way to find out the sources for incoming and outgoing payments, and to tie up certain expenditures in the planning.» (Mülhaupt, 1987: 97; translation from German)

In summary, the focus within administrative cameralistics is on the following: (1) money management, (2) budgetary control and (3) payment control. Regarding (1), the financial development directly appears from the cameral account structure (revenues and expenditures in the *Current dues* columns and cash inflows and outflows in the *Actuals* columns). Moreover, by using the same cameral account structure also for the budget, it is possible to carry out budgetary control (2), focusing on comparing budgeted and real (accounting) revenues and expenditures (CD-columns) and/or comparing budgeted and real cash inflows and outflows (A-columns). Regarding (3), the cameral account structure makes it possible to control that no money is received or paid without a previous instruction to do so, by comparing the *Current dues* (revenues or expenditures for which payment instructions have been given; see Monsen 2002, for further details in English) and *Actuals* (cash flows) columns.

In the German literature we find different opinions with regard to the question if and how a balance sheet should be prepared within the framework of administrative



cameralistics (Wysocki, 1965: 38-39). Specifically, in this literature one discusses whether the balance sheet should be prepared in “verbundener Form” (i.e., in a directly linked way) or in “unverbundener Form” (i.e., not in a directly linked way). When preparing the balance sheet in “verbundener Form”, there is a direct link between the balance sheet and an income statement, implying that the performance result (revenues earned minus expenses incurred) appears both via the activity side (the income statement) and via the payment side (the balance sheet) (Walb, 1926; see Monsen, 2002, for further details in English). This is the situation both within commercial double-entry bookkeeping and within enterprise cameralistics, resulting in the preparation of a comprehensive balance sheet. On the other hand, when preparing the balance sheet in “unverbundener Form”, there is no such direct link between the balance sheet and an income statement, resulting in the preparation of a non-comprehensive balance sheet. According to Wysocki (1965: 43), the reporting of net equity (assets minus liabilities) is a formal necessity when the balance sheet is prepared in “verbundener Form”. However, within administrative cameralistics, which is used by the core governmental administration, Wysocki (1965) states:

“Since the economic activity of a governmental administration cannot be evaluated by focusing on the performance result (revenues earned minus expenses incurred), the equity changes appearing from a comprehensive balance sheet do not contain any information value of themselves.” (Wysocki, 1965: 43; translation from German)

Thus, within administrative cameralistics, a comprehensive balance sheet is not prepared, but rather a non-comprehensive balance sheet. Specifically, the balance sheet within administrative cameralistics contains monetary claims and obligations for which payment instructions have been given, but are not yet paid (cp.  $R=RD+CD-A$ ).

## **The Bergen Project**

The Bergen Project was an empirical research project jointly carried out by a group of researchers at NHH and local actors in the City of Bergen, Norway. The purpose of the project was to develop and prepare a new annual report for the City, satisfying needs and wishes of local actors. Moreover, a further purpose was to report on and study the process of developing and preparing the new annual report, its structure, as well as the reactions of local actors to the new annual report. Hence, the research project can be

described as action research, because the researchers studied a social system by changing it (cp. Argyris *et al.*, 1985: 8).

The project started in September 1984 with a meeting of the research group and local actors of the City of Bergen, Norway. At this meeting, the Swedish leader of the research group presented the plans for the research project in the City of Bergen, as well as his experiences from a longitudinal empirical research project he had earlier carried out in the City of Uppsala, Sweden (see Olson, 1983). Although the Bergen Project was carried out more than 15 years ago, experiences from this project are as relevant today, as they were in the 1980s. This statement is motivated, among other things, by the following: (1) In an editorial in *Accounting, Organizations and Society*, Hopwood (1978: 93) pointed out that “we have hardly any examples of changes jointly designed and monitored by researchers and practitioners”. Although this statement dates from the latter part of the 1970s, still we do not have many reports on action research in accounting. Moreover, the Bergen Project was really a huge longitudinal action research project, and although it has already been reported upon in a number of studies (doctoral theses: Høgheim, 1990/1992; Mellemvik, 1989; Monsen, 1989/1993; Olsen, 1990; international articles: Høgheim *et al.*, 1989; Monsen and Olson, 1996; and books: Mellemvik and Olson, 1996; Olson, 1987), the cameral accounting framework has not been used in these studies; (2) Most current developments of governmental accounting seem to focus on the preparation of accrual accounting information. In any case, as far as the author knows, there is no more recent empirical research project reported on in the international research literature than the Bergen Project, focusing on the development of a financial statement which fits into the framework of cameral accounting. Hence, the new financial statement developed in the Bergen Project is still the most relevant financial statement to discuss in this article, focusing on the development of cameral accounting.

The research group in the Bergen Project, consisting of the Swedish project leader and four Norwegian doctoral students, participated in developing and preparing a new annual report for the City of Bergen (for 1984-86). The first report was strongly influenced by the annual report for the City of Uppsala, Sweden. Moreover, the local governmental accounting technology in Norway was learned (see Mellemvik, 1985/1987; Monsen, 1985/1987), and interviews were carried out with local politicians and officers in the City of Bergen to learn their reactions to the state required accounting report, and to learn their wishes for a new annual report, if any (see Monsen,

1993; Olsen, 1987). The process of preparing the annual report for 1984 influenced the structure of that report, which in turn created internal reactions, i.e. reactions by local politicians and officers in the City of Bergen. The internal reactions to the 1984 annual report were analysed by the researchers, and they thus influenced the process of preparing the next annual report (for 1985), etc. This means that the action research process in the City of Bergen can be characterised as a step-wise process consisting of actions and reactions (Polesie, 1981), or as a way of «muddling through» (Lindblom, 1959). The research process is illustrated in Figure 1.



**Figure 1:** Overview of the action research process.

After the fact that the research group had participated in developing and preparing the three first annual reports for the City of Bergen (for 1984-86), the City continued to prepare succeeding annual reports on its own account. The action research process in the City of Bergen, including the resulting annual reports and reactions to these reports, have been studied and reported upon in previous studies (see above for references), and other local governments in Norway have also started to prepare locally designed annual reports as a supplement to the official annual accounts, which are required by the statutory accounting rules. This development can be regarded as external reactions to the Bergen Project, and they are discussed in Mellemvik and Monsen (1993).

The content of the new annual report (for 1986) for the City of Bergen (City Treasury), consists of 3 main parts: (1) Statement of the Chief Municipal Administrative Officer, (2) Financial Analysis, and (3) Departments' Section. The annual report is regarded as the Chief Municipal Administrative Officer's report to the politicians (Olson, 1987), he therefore comments upon the development in the City in the first part of the annual report. In the second part, a financial analysis of the

development in the City is given, followed by a more detailed overview of the developments in the various municipal departments. Also, an Appendix giving more detailed information is added to the annual report itself. In the following, the focus will be on the new financial statement that was presented in the Financial Analysis in the annual report.

### **Developing a new financial statement**

When developing a financial statement to be presented in the new annual report, the main financial statement, as it was presented in the official state required accounting report (referred to as the Government Financial Statement (GFS); se Appendix 1), was taken as the point of departure. A detailed analysis of this particular statement is beyond the scope of this article (see e.g., Mellemvik, 1987; Monsen, 1987,1993, for further details on this statement); here it suffices to point out that due to the fact that the local governmental accounting rules in Norway are a combination of two principally different accounting technologies, that is, the cameral and commercial accounting technologies (Monsen, 2001b), the GFS is very complicated and difficult to understand. Interviews with local politicians therefore revealed a need for developing a more informative financial statement (Olsen, 1987).

At the time when the Bergen Project started in the mid 1980s, there were no strong calls for the introduction of commercial (accrual) accounting in the governmental sector; such calls have mainly appeared in the international research literature in later years (see e.g. articles in the following volumes: Buschor and Schedler, 1994; Caperchione and Mussari, 2000). Moreover, the interviews with local actors in the City revealed no demand for accrual accounting information; on the other had, there was a demand for a better overview of how the City had acquired and spent its financial resources (see Høgheim, 1992; Monsen, 1993; Olsen, 1987). It was therefore decided to develop a new and informative financial statement for the core administration of the City of Bergen (i.e., the City Treasury), showing the sources for the acquisition and uses of financial resources (that is, a funds flow statement).

It turned out to be difficult to transform the GFS into a funds flow statement and it took about 6 months of work to achieve this, mainly by eliminating internal financial transactions (Monsen, 1993). The structure of the funds flow statement which was prepared had a transaction orientation, i.e., the various types of transactions were presented but not aggregated into analytical terms, and accounting figures were

presented for the past 3-year period (see Appendix 2; see Brorström, 1982, for a further discussion of this type of financial statement).

The main reason for presenting this particular funds flow statement was to learn the reactions from the local politicians and officers before developing it further. These reactions came from formal interviews (see Monsen, 1993), via the grapevine, and during a series of seminars (five in number) for the top politicians and officers of the City (see Monsen, 1993). The seminars took place during the spring of 1985. They were arranged by the research group and took place before the annual report for 1984 was published. It was suggested that ex-post accounting information could play a more important part in the local government's control process than it had been doing. The seminar participants were given topics for group discussion between the seminars, and one of the topics was to prepare a funds flow statement for their own City. An extensive discussion of the funds flow statement at the following seminar turned out to be the first time that the participants had ever understood and discussed the accounting figures of their own organization. In particular, they learned that the City was going through a period of expansion rather than stagnation, as everybody believed (Monsen, 1993).

As a result of the discussion of the funds flow statement at the seminar, some minor changes were made before the statement was published in the annual report for 1984 (see Appendix 2). Interviews with the top politicians and officers after the publication of the new annual report, revealed that the respondents felt very positive about it (Monsen, 1993). They still had some difficulty in understanding the funds flow statement, and were keen to develop it to make it more informative. A number of alternative formats were therefore discussed, and three were chosen for further study (see Monsen, 1993). Two of these were modified versions of the 1984 statement, and the third was largely a copy of a funds flow statement presented in the 1982 annual report for the City of Uppsala in Sweden. This latter statement structured the transactions according to operating, investing and financing activities, and the first version of such a structure had appeared in Uppsala's 1978 annual report.

One member of the research group held interviews with the top politicians and officers in Bergen to find out which one of the three funds flow statements they wanted in the 1985 annual report. All the respondents favoured a funds flow statement with integrated explanations in the annual report, because they wanted to see how the city had acquired and spent its financial resources. The majority wanted the third alternative, structured according to operating, investing and financing activities (see Monsen, 1993).

Accordingly, this was the format used when the funds flow statement was presented in the 1985 annual report. Some minor changes based on interviews with local politicians and officers were made later, before the statement was presented in the 1986 annual report. The funds flow statement has been presented in a similar way in subsequent annual reports, and it is referred to as the Bergen Model.

### **Structure of the Bergen Model**

The Bergen Model (BM), which is shown in Appendix (3), has the following characteristics: (1) it is structured according to operating, investing and financing activities; (2) it has a minimum of lines under each activity; (3) each line represents revenues or expenditures; (4) three years of ex-post accounting figures, and the adopted budget and variance for the fiscal year are presented; and (5) it contains a special breakdown of the change in working capital, focusing on change in liquid assets.

As pointed out above, the funds flow statement for 1986 (i.e., the BM) is basically identical with the funds flow statement for 1985, and interviews with the top politicians and officers in the City revealed that they were very positive to this particular financial statement (see Monsen, 1993). In particular, they found the overview of the financial development of the City in the BM particularly interesting. Furthermore, 17 of 19 respondents found it of special interest not only to see ex-post accounting figures in the BM, but also budgeting figures, allowing for carrying out budgetary control (i.e., comparing accounting and budgeting figures) (see Monsen, 1993, for further reactions to the BM).

### **Discussion**

Historically, the local governmental accounting rules in Norway have been influenced by German cameral accounting thinking (Monsen and Näsä, 1996; Monsen, 2001b). Even though we since 1924 have used the commercial double-sided account (debit and credit sides) and not the cameral single-sided account structure (revenues or expenditures sides), we still have a strong cameral accounting influence on the local governmental accounting rules in Norway (Monsen, 2001b). In fact, this statement can be formulated more precisely as follows: we still have a strong influence of *administrative cameralistics*, due to the following characteristic features of the local governmental accounting rules in Norway:

- money management
- budgetary control
- non-comprehensive balance sheet

The main focus of the local governmental accounting rules in Norway is on money management in the form of revenues and expenditures. The rules apply both to the budget and the accounts, allowing for budgetary control, by comparing budgeting and accounting figures. When the BM was developed, fixed assets were only to a limited extent reported on the balance sheet, implying that a special variant of a non-comprehensive balance sheet was prepared. Although later local governmental accounting rules require fixed assets to be reported on the balance sheet, the balance sheet is not prepared in “verbundener Form”. This means that the net equity change on the balance sheet is not directly linked to a performance result (revenues earned minus expenses incurred) in an income statement, such as the case is within enterprise cameralistics and within commercial double-entry bookkeeping, resulting in a comprehensive balance sheet (see e.g., Walb, 1926). Hence a comprehensive balance sheet is not prepared within local governmental accounting in Norway, but rather a special variant of a non-comprehensive balance sheet (see Monsen, 2001b, for further details). In fact, Monsen (2001b) argues that the reason why we find a complicated local governmental accounting technology in Norway, is our attempts to continue focusing on cameral objectives (i.e., the objectives of administrative cameralistics, especially money management in the form of revenues and expenditures, and budgetary control, by comparing budgeting and accounting figures), while at the same time using the commercial account, as opposed to the cameral account structure. While the cameral account has been specifically designed to deal with money management and budgetary control, the commercial account allows specifically for dealing with the performance development (revenues earned minus expenses incurred), independent of when the related money transactions occur (see e.g., Monsen, 2001a). Hence, it should come as no surprise that an accounting system which is based upon two principally different accounting technologies, such as the cameral and commercial technologies (Walb, 1926, p. 208), becomes complicated and difficult to understand (Monsen, 2001b).

When developing the BM, nobody in the research project was familiar with cameral accounting; hence no references were given to cameral accounting when developing the BM. As Monsen (2002) points out more than 15 years after the Bergen Project was carried out, most of the literature dealing with cameral accounting has been published in

German and is known beyond the German speaking countries to a limited extent only. It is only in recent years that a few studies referring to cameral accounting have been published in English in the international research literature (see particularly Monsen, 2001a, 2002), thus making it possible for us to analyse the BM (see Appendix 3) from a cameral accounting point of view.

When we do this, we find the following similarities between the BM and cameral accounting in the form of administrative cameralistics: (1) money management and (2) budgetary control. The main focus both of the BM and of administrative cameralistics is on money management in the form of revenues and expenditures, and both the BM and administrative cameralistics focus on budgetary control, by not only containing accounting figures, but also budgeting figures. Moreover, the balance sheet that supplements the BM is non-comprehensive, because mainly financial items, and only some fixed assets, are reported on the balance sheet (see Monsen, 1987, 1993); this is also a similarity with administrative cameralistics.

Referring to the cameral account structure in Table 1, the column *Current dues* on the revenues and expenditures sides directly shows the revenues and expenditures, respectively. Moreover, the column *Actuals* on the revenues and expenditures sides directly shows the cash inflows and cash outflows, respectively (see e.g., Mülhaupt, 1987; Monsen, 2001a, 2002). Hence, a funds (cash) flow statement can be prepared more easily based upon the cameral account structure than based upon the commercial account: A funds flow statement showing revenues and expenditures can simply be prepared by focusing on the revenues and expenditures, as they appear in the *Current dues* columns, and, for example, classifying them as either operating, investing or financing activities. By following a similar procedure, but focusing on the *Actuals* columns, we can prepare a pure cash flow statement (Monsen, 2001a).

The BM was prepared by focusing on the revenues and expenditures, as they were directly reported in the official accounts of the City of Bergen (see Monsen, 1993). This means that when preparing the BM, a procedure similar to the one suggested above when departing from the cameral account structure, was used: the BM was prepared by focusing on the revenues and expenditures, which were directly reported in the accounts, and by grouping them into three groups, namely, operating, investing, and financing activities.

In summary, it can be concluded that the BM fits into the framework of cameral accounting (administrative cameralistics), both with regard to the figures in the model



(revenues and expenditures, both in the form of accounting and budgeting figures) and with regard to the preparation of the model (directly focusing on the revenues and expenditures, and classifying them as operating, investing or financing activities).

## **Conclusions**

Interviews with local politicians and officers in the City of Bergen revealed that they wanted a more informative financial statement than the GFS, which they did not understand. Specifically, they felt a need for a financial statement showing how the City had acquired and spent its financial resources. Therefore, a funds flow statement, referred to as the BM, focusing on the sources for and uses of financial resources in the form of revenues and expenditures, was developed. As argued above, the BM fits into the framework of cameral accounting (administrative cameralistics), because the focus of the BM is on money management and budgetary control. Also, the preparation of the BM is similar to a procedure suggested by Monsen (2001a) for preparing such a financial statement when departing from the cameral account structure: the preparation could simply be undertaken by focusing on the revenues and expenditures, as they are directly reported in the accounts, and by grouping them into three groups, namely operating, investing and financing activities.

It turned out, however, to be difficult to transform the GFS (see Appendix 1) into a funds flow statement (i.e., the first version of the BM; see Appendix 2), because we find a complicated local governmental accounting technology in Norway. The reason for this situation is the fact that we in Norway use the commercial double-sided account (debit and credit sides) and double-entry bookkeeping, while at the same time continue focusing on the objectives of administrative cameralistics (especially money management in the form of revenues and expenditures, and budgetary control, by comparing budgeting and accounting figures) (see Monsen, 2001b, for further details).

Given this situation, what could we do if we want to improve governmental accounting and control? One approach could be to follow the advice of Ernst Walb (1926), which has been presented at the outset of this article:

«The introduction of commercial accounting in the total public sector was only an intermezzo. It had to fail, because one had not shown sufficient consideration for the special demands, which the state sector makes on an accounting system. One could not remove the disparities totally in the way that had been chosen; rather one had to develop the existing accounting system.» (Walb, 1926: 215; translation from German)

After analysing the applicability of commercial accounting in the public (governmental) sector, Walb argues for *developing* the existing accounting system, that is, developing the cameral accounting system, as opposed to *replacing* it with commercial accounting. Keeping in mind that the cameral account structure and the cameral bookkeeping method have been specifically developed to contribute to increased control of public money, we could continue using the cameral account structure and the cameral bookkeeping method during the fiscal year. By so doing, the separation of the four different columns in the cameral account structure (see Table 1) would be helpful for controlling the development in a governmental organization along different dimensions: money management, payment control and budgetary control. At the same time, however, use of four different columns both on the revenues and expenditures sides makes it somewhat difficult to get an overview of the development in the governmental organization. Hence, after there has been a detailed control operating during the fiscal year along the three dimensions mentioned, in the annual report of the local government we could prepare a financial statement giving an overview of the most important dimensions, that is, accounting and budgetary revenues and expenditures: we could present the BM (see Appendix 3) in the annual report.

If we use the cameral account structure and the cameral single-entry bookkeeping method during the fiscal year, as opposed to the commercial account and the double-entry bookkeeping method, it would be much easier to prepare the BM than what is the case today. We could simply depart from the revenues and expenditures, which then would have been directly reported in the *Current dues* columns, and we could classify them according to whether they relate to operating, investing, or financing activities. Moreover, a combination of using the cameral account structure and the cameral single-entry bookkeeping method during the fiscal year with the presentation of the BM in the annual report, would not only be a development of cameral accounting; it would also satisfy wishes and needs of users of governmental accounting information, as they have been expressed in the action research process of developing and preparing the BM. Consequently, *adding* the Bergen Model to the cameral account structure and the cameral bookkeeping method is a way of *developing* cameral accounting, satisfying user needs for governmental accounting information.

## Appendix 1

### City of Bergen Government Financial Statement (GFS) for 1984 (NOK million)

	Operating expend. & revenue			Investment expend. & revenue		
	Expend.	Revenue	Net expend.	Expend.	Revenue	Net expend.
1.0 Common expenditure	323	328	-5	3		3
1.1 Central administration	120	8	112	4		4
1.2 Education	555	156	399	30		30
1.3 Health care	160	89	71	2	4	-2
1.4 Social care and Social security	543	221	322	27	2	25
1.5 Churches and Culture	100	15	85	6		6
1.6 Development and Housing	436	283	153	145	27	118
1.7 Business activities	64	34	30	13	3	10
1.8 Miscellaneous purposes	239	29	210	12	4	8
-----						
--- Total	2,540	1,163	1,377	242	40	202
1.90 Taxes, etc.		1,250	-1,250			
1.90 Tax equalisation		6	-6			
-----						
---- Operating surplus /deficit	2,540	2,419	121			
Investments	242	40	202			
-----						
---- Deficit before lendings, borrowings and allocations	2,782	2,459	323			
1.92 Surplus / deficit in previous years	23	2	21			
1.93 Lendings	56	29	27			
1.94 Appropriations carried over	17	8	9			
1.95 Reserves	78	24	54			
1.96 Borrowed from reserves		20	-20			
1.97 Cash in hand	16	19	-3			
1.98 External borrowings	121	315	-194			
1.99 Surplus / deficit for the year		217	-217			
-----						
--- Total	3,093	3,093				
-----						
---						

## Appendix 2

### City of Bergen Funds Flow Statement (NOK)

	1984		1983		1982	
	1000	%	1000	%	1000	%
-----						
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<b>Sources of funds</b>						
Taxes	1,255,978	47.1	1,223,589	50.1	1,142,184	55.7
Transfers from central govt.	351,756	13.2	270,824	11.1	233,571	11.4
Interest	21,119	0.8	16,241	0.7	27,193	1.3
Other transfers	146,650	5.5	164,943	6.8	136,232	6.6
Other revenue	316,148	11.9	266,555	10.9	209,630	10.2
New borrowings	319,431	12.0	324,518	13.3	225,041	11.0
Repayments of loans, received	29,322	1.1	21,595	0.9	13,931	0.7
Increase in short-term debt	212,011	7.9	110,007	4.5		
Decrease in cash etc.			41,787	1.7	62,878	3.1
Decrease in accounts receivable	14,627	0.5				
Decrease in sundry current assets	1,009	0				
-----						
	2,668,051	100.0	2,440,059	100.0	2,050,660	100.0
-----						
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<b>Application of funds</b>						
Operating expenditures	1,522,929	57.1	1,413,519	57.9	1,242,076	60.6
Interest	164,779	6.2	140,898	5.8	103,592	5.1
Other transfers	516,034	19.3	392,465	16.1	326,116	15.9
Net investments	201,752	7.6	298,072	12.2	184,072	8.9
Repayments of external loans	120,858	4.5	119,620	4.9	105,826	5.2
New lendings	56,410	2.1	60,441	2.5	43,332	2.1
Increase in accounts receivable			14,096	0.6	22,025	1.1
Increase in sundry current assets			948	0	112	0
Decrease in short-term debt					23,509	1.1
Increase in cash etc.	85,289	3.2				
-----						
	2,668,051	100.0	2,440,059	100.0	2,050,660	100.0
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## Appendix 3

### City of Bergen Bergen Model (BM) (NOK million)

Accounts			Adopted	
1984	1985	1986	Budget 1986	Variance 1986
<b>Ordinary activities</b>				
<i>Revenue</i>				
1,256	1,462	1,614	1,601	13
352	488	459	420	39
484	575	657	614	43
<i>Expenditure</i>				
-2,041	-2,255	-2,472	-2,290	-182
-165	-188	-230	-225	-5
-114	82	28	120	-92
<b>A. Net ordinary activities</b>				
<b>Investing activities</b>				
40	39	44	35	9
-239	-208	-221	-184	-37
-199	-169	-177	-149	-28
<b>B. Net investing activities</b>				
<b>Financing activities</b>				
<i>Borrowings</i>				
319	286	305	279	26
-121	-85	-54	-48	-6
<i>Lendings</i>				
29	38	38	24	14
-56	-57	-58	-53	-5
171	182	231	202	29
<b>C. Net financing activities</b>				
-142	95	82	173	-91
<b>Change in working capital (A+B+C)</b>				
<b>CHANGE IN LIQUID ASSETS</b>				
-142	95	82		
15	-15	-66		
212	-91	102		
85	-11	118		
<b>Change in liquid assets</b>				

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