

Expenditure and Budgetary Control in Urban Local bodies in India - Developing Prism Model

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Abstract

Expenditure should be prudently controlled through budgetary control. Different reports and available data show that the expenditure and budgetary control systems in Indian urban local bodies is generally poor and it needs strengthening. The accounts department, which prepares the budget, should have access to the relevant data at an early stage and we propose that *financial concurrence* (or early commitment approval) should be required from the accounts department for each proposal that may result in expenditure for capital works. Commitment control, a long standing practice in the public sector, could be refined by this *concurrence control*. No budgetary control system is effective unless it provides for the integration of budgeting, accounting and financial accounting. Indian urban local bodies are required to follow the accrual basis of accounting, according to the National Municipal Accounts Manual. We have developed a *Prism Model* which integrates concurrence accounting, accrual accounting and budgetary control.

Note: Authors have developed their own terms: Financial Concurrence, Concurrence Control, Prism Model.

Introduction

Public expenditure management is an essential task to be performed by any government for economic development (Vukicevic & Bartholomew, 2008) and “expenditure control is an essential element of fiscal discipline” (Radev & Khemani, 2009, p.1). Expenditure control is a comprehensive approach for appropriate fiscal management and budgetary control is used as a tool for this purpose. Budgetary control consists of budget preparation, comparison of actual results with those forecasted and the revision of budget in the light of changed circumstances.

In India, urban local bodies are the bodies responsible for local government. Budgets of urban local bodies are debated and approved official documents, as well as legal documents. Budgets include revenues and expenditures and are prepared at the end of a financial in preparation for the coming year.

Budgets are a short term plans (typically covering only one year), expressed in financial terms which have been used for a long time by governments. The budget, after approval, is considered as the authority for raising revenues and incurring expenditure. Efficient financial management is

possible through effective use of the budget and budgetary control should ensure the financial plan, agreed by the council or board of management, is achieved (Ojo, 2009).

In recent years expenditure in urban local bodies has become increasingly difficult to control. Systems of budgetary control are not rigid and there should be enough flexibility to provide initiative and drive for monitoring expenditure. Therefore budgetary control may prudently be used as a tool for expenditure control not only to restrict the expenditure within the budgetary limit but also to provide relevant information for better management decisions, financial control and future planning.

In an urban local body there are some procedural formalities which are required to be complied with before incurring expenditure. In order to achieve the goal of budgetary control there is a need to identify the appropriate stage for development and application of a control mechanism. It is the primary norm of budgetary control that no expenditure will be incurred (accrual basis) or no payment made (cash basis) unless it is backed by a specific budgetary allocation. The unencumbered balance may be stated as the amount which is free of any claim against the appropriation (Treasury Board of Canada Secretariat, 2009) and it reduces gradually as orders etc are raised and expenditure incurred or payment made.

Now a question arises whether control for verification of unencumbered balance at the time of making payment is sufficient to restrict expenditure within budgetary limits. This is possible if payments are only made if there adequate unencumbered balances. Therefore control at the time of payment does not ensure a situation that all the payments, whenever and whatsoever, will always be made. As a result the researchers explored other alternative stages for verification of unencumbered balances.

Commitment denotes is a pledge or agreement which signifies an obligation to pay a sum of money at a future date and it arises with the issue of works orders, that is when a decision is made to incur a commitment. Commitment control is considered as an important management practice in governments and is integral to sound budget control, forecasting and allocation and reallocation of program resources (Treasury Board of Canada Secretariat, 2009). Commitment control is applied through commitment accounting which recognizes goods and services ordered by the government. Commitment accounting provides a more useful record of “spending”, at an earlier point, when an official order is issued for the supply of goods or services against a budget. This provides earlier budgetary control than either the point when goods and services are received, or when cash is paid (Jones, 2007).

Urban local bodies undertake public works for development, as well as maintenance of infrastructure within the municipal area. We think that the verification of unencumbered balance should be made even before the issue of an official order and this will be more effective in controlling the expenditure. The first named author had the opportunity to develop a control system in an Indian urban local body in 1998 through the verification of unencumbered balance before the issue of official orders, the introduction of a system of obtaining financial concurrence from the accounts department and the introduction of “*Concurrence Accounting*” duly integrated with the cash basis of accounting. This paper evolves from these reforms with the further development and the integration of the accrual basis of accounting. Finally a model, the *Prism*

Model, has been developed for such a control system which produces seven considerations for control, planning and forecasting purposes. These considerations are the result of concurrence accounting and financial accounting and their mutual integration.

Background on Indian Urban Local Bodies

Indian Urban Local Bodies were conferred the status of third tier local governments through the Constitutional Amendment Act, 1992. The Ministry of Urban Development, Government of India formulated the National Municipal Accounts Manual in 2004. The manual is applicable to all urban local bodies. States can also develop state level manuals based on the national manual to suit their particular requirements. The National Municipal Accounting Manual outlines the accounting policies, procedures and guidelines designed to ensure correct, complete and timely recording of municipal transactions and to produce accurate and relevant financial reports. The manual also provides guidelines for the preparation of budgets and the implementation of effective budgetary control systems. It recommends the integration of the budgeting and accounting systems to achieve better control.

Aims of the paper

Indian urban local bodies have proved to be poor at controlling expenditure with the existing system of budgetary control, not only at the overall level of the budget, but also at the level of individual line items of the budget.

Our paper aims to achieve expenditure control through strengthening the budgetary control system as indicated in the audit reports of the Comptroller and Auditor General of India. We also recommend that control should be in the hands of accounts department.

Ascertaining the objectives of the control system is important. Is there any need for separate budgetary control measures when accounting control is in place? We have tried to answer this question and have identified the appropriate stage for initiating budgetary control.

We propose to replace commitment control by *concurrence control* and for this purpose we recommend the introduction of:

- (a) a system of obtaining financial concurrence
- (b) *concurrence accounting*
- (c) the integration of *concurrence accounting* and financial accounting (accrual basis).

Finally we have developed a *Prism Model* and have provided an analysis and explanation of the model along with details of seven considerations.

First we review the National Municipal Accounting Manual and a range of financial reports to identify the key criteria for consideration in developing our proposed control system. We also provide data from different Indian urban local bodies to enable readers to appreciate the extent of under-spending and over-spending in Indian urban local bodies.

Observations on the National Municipal Accounting Manual

The National Municipal Accounting Manual provides guidelines for the preparation of budgets following a bottom up approach and recommends control requirements to be built into the budgeting system.

Our review of the Manual reveals the following:

- **Multi-stage budget availability checking:** budget availability to be checked at different stages (before undertaking any work, at the time of accruing expenditure, at the time of approval of the payment).
- **Different basis for budget preparation and monitoring:** budget preparation, approval and control processes are on the cash basis, but budget monitoring is on the accrual basis.
- **Different basis for budget preparation and accounting:** “Governments should be encouraged to operate their budgeting and accounting systems on the same basis” (Budget Reporting Research Report, 2004, pp. 3). The manual suggests integrating budgeting and accounting to enable better control, but the basis for budget preparation (cash basis) and accounting (accrual basis) differs.
- **Absence of system for commitment accounting:** budget availability should be checked after considering all commitments, but guidance is not provided on how commitments should be accounted for in a systematic manner.
- **Absence of system for generating information through integration:** the Manual does not describe an appropriate system for generating useful information for the budget makers from an integrated accounting and budgeting system.
- **No budget variance report with commitments:** the budget variance report (BVR) should form the basis of control, but the Manual does not recommend an appropriate report format including commitments.

Comments from Official Reports

Relevant extracts from different reports on public financial management in urban local bodies are provided to present a picture of expenditure control through budget preparation and budgetary control in Indian urban local bodies:

- **Accounts department prepares the budget:** “The Accounts Department shall in consideration of the departmental requirement and probable resources prepare the Draft Annual Budget Estimates which shall be finalized by the Chairman with the help of the officers without any budget deficit” (Comptroller and Auditor General, 2008a, pp.9).
- **Budgeting serves a limited purpose:** “Key financial management processes, such as budgeting, are outdated and serve a limited purpose in many local governments... While the scope of activities of local government has changed substantially over the past hundred years, the budgeting system has hardly undergone any measure of change or transformation to any material extent” (Ministry of Urban Development Government, 2011, pp.110)
- **Incremental Approach is followed:** “Budgets are prepared by the accounts department based on estimates of revenue and expenditures of the previous financial year. Due to

lack of relevant information, most revenue estimates are based on *ad hoc* or percentage increases over the previous year's budget, without taking into account the actual potential or requirement" (Synthesis Report, 2006, pp.13).

- **Poor expenditure control as budget is merely a statutory requirement:** "Budgets in Indian urban local bodies are generally a statutory requirement and are not seen as a management tool at all... Budgets are only referred to for making financial sanction... This, usually, results in poor expenditure controls, inadequate reporting and an incentive to spend the budget allocation as soon as possible" (Synthesis Report, 2006, pp.13).
- **There is an absence of control over expenditure due to the non-submission of budgets and revised estimates:** during the five year period 2003-08 the Comptroller and Auditor General of India observed the following in 14 Town Panchayets:
 - non-submission of the annual budget in three Town Panchayets
 - delay in approval of the budget (1 month in 25 cases, 2 months in eight cases, 3 months in one case and 4 months in two cases)
 - submission of revised budget after the close of the accounting year (1 month in 18 cases, 2 months in four cases, 3 months in one case and 4 months in two cases)

The CAG concluded that non-submission of budgets and revised estimates before the council for approval has deprived the council of the opportunity to exercise control over expenditure and also affected the preparation of budget for ensuing years (Comptroller and Auditor General of India, 2008b, pp. 28).

- **Budgetary control system is absent:** "The budget document is ill structured. Also the budgetary control system is almost absent, and as a result, bills of one budget head get booked in another head. Also in certain cases expenditure goes beyond budgetary allocations" (NIUA, 2010, pp.44). "There was laxity in control over expenditure as there was delay in approval of budgets and submission of revised estimates by some Town Panchayats" (Comptroller and Auditor General of India, 2008b, pp.42). "There was lack of budgetary control and absence of reliable budget formulation" (Comptroller and Auditor General of India, 2008a, pp. 20).
- **Budget is not used as a tool of financial control:** "Budget was not adequately used as a tool of financial control. The Municipality had an unspent fund of Rs.8.07 crore, some of which had been received as far back as in 2003-04" (Comptroller and Auditor General of India, 2008a, pp.37).
- **There is no system of Financial Concurrence:** Comptroller and Auditor General of India observes "The Municipality has no system of financial concurrence before taking up new work or procurement of material conforming to budget provision and availability of funds resulting in excess expenditure over budget provision" (Comptroller and Auditor General of India, 2008b, pp.40).
- **Budget is to be linked to accounting system:** "To enable the budget document to be used as an effective tool for planning, procurement and expenditure control it is essential for the budget to be linked to the accounting systems and the Management Information System" (Synthesis Report, 2006, pp. 15).
- **Budgetary control needs strengthening:** the Comptroller and Auditor General of India has pointed out in several reports that budgets are not adequately used as a tool of financial control and there is little control over budget formulation rendering the budgets unreliable. Financial management is deficient as budget estimates are not being prepared

on a realistic basis. The annual budget estimates are prepared in a routine manner and the budget is not used as a tool to exercise control over expenditure and monitor resource use.

The Extent of under-spending and over-spending

From the above, the accounts department follows an incremental approach due to the lack of relevant information which results in large variations between budget and actual spending, even in places like Bangalore where the budgeting systems are better developed (SynthesisReport, 2006). This is also established in audit reports of the Comptroller and Auditor General of India. Audits of urban local bodies under different State Governments are conducted by the decentralised offices of the Comptroller and Auditor General of India every year. A consolidated report, consisting of major observations, is published and submitted to the respective State Governments.

An indication of the results is shown by the following data which is taken from these reports:

Figure 1: Over-spending (Rupees - Indian Currency in lakhs) (10 lakhs= 1 Million)

Name of ULB	Year	Type of Expenses	Budget or Revised Budget	Actual	Excess	% of Overspend
Chandrakona ¹	2001-02	Total	68	104	35	52
South Dum Dum ¹	2001-02	Total	1,918	2,530	612	32
Barrackpore ²	2002-03	Capital	256	335	79	31
Guskara ³	2004-05	Capital	357	640	283	79
Serampur ³	2005-06	Revenue	723	816	93	21
Madurai ⁴	2003-04	Revenue	140	153	13	9
Salem ⁴	2002-03	Revenue	29	138	109	379
Tirunelveli ⁴	2002-03	Revenue	10	19	9	82
Tirunelveli ⁴	2004-05	Revenue	4	21	17	483

Figure 2: Under-spending (Rupees - Indian Currency in lakhs) (10 lakhs= 1 Million)

Name of ULB	Year	Type of Expenses	Budget/ Revised Budget Estimate	Actual	Excess	% of Utilisation
Bangaon ¹	2001-02	Total	2,359	459	1,900	19
Pujali ¹	2001-02	Total	2,109	255	1,854	12
Dhupguri ²	2002-03	Capital	443	35	408	8
Gayespur ³	2004-05	Revenue	336	203	133	60
Sainthia ³	2005-06	Revenue	203	123	80	61
Balurghat ³	2006-07	Revenue	475	313	161	66
Coimbatore ⁴	2003-04	Elementary Education Fund	603	186	417	31
Tiruchirapalli ⁴	2003-04	Elementary Education Fund	200	28	172	14
Tiruchirapalli ⁴	2004-05	Elementary Education Fund	221	120	100	55
Tiruchirapalli ⁴	2005-06	Elementary Education Fund	235	97	138	41
Tiruchirapalli ⁴	2006-07	Elementary Education Fund	310	8	302	3

Tirunelveli ⁴	2003-04	Elementary Education Fund	100	19	81	19
Salem ⁴	2003-04	Elementary Education Fund	62	13	49	22
Salem ⁴	2004-05	Elementary Education Fund	208	92	116	44
Salem ⁴	2005-06	Elementary Education Fund	199	80	120	40
Salem ⁴	2006-07	Elementary Education Fund	155	42	113	27

Source of figure 1 to 2: Audit Report on ULBs for the year ended:

1. West Bengal, 31 March 2004 (Appendix 1, pp. 1-3)
2. West Bengal, 31 March 2005 (Appendix 2A, pp.80-81)
3. West Bengal, 31 March 2007 (Appendix- 2A, 2B and 2C (pp. 92-94)
4. Audit Report (Local Bodies) for the year ended 31 March, 2007 (Tamil Nadu), Appendix- 2.11, pp.146)

Accounts Department in Control

Thurmaier (2007) observes that the managerial approach to budgeting and budget execution is relevant to local governments not only in developing countries, but also in developed nations. In his opinion the determining factor of this approach is not what the local government does, but it is the intent of the governing body and chief executive on ensuring that local government activities are executed effectively and efficiently:

- (i) within the legal and financial constraints imposed in the budget and
- (ii) other local government regulations.

The National Municipal Accounting Manual states that the basis for preparing the budget will be the inputs from various departments/units following a bottom up approach. As the accounts department takes the overall responsibility for preparation of the budget, a managerial approach will be successful if the required information is made available. However, in reality this department, especially in small and medium urban local bodies, does not receive the information it requires. *The result is that the budgets in such local bodies are not prepared scientifically, so budgetary control is next to impossible.*

If small and medium urban local bodies want to control expenditure, a budgetary control system needs to be developed in such a way that the accounts department can exercise full control and receive the information it requires in a timely manner.

Usual Practice for Execution of Work

There are certain stages for the execution of works in Indian urban local bodies. First of all an estimate must be developed for the work, giving details of the work with rates and measurement (quantity). Thereafter it is sent for administrative approval. An urban local body then issues a notice inviting tenders or quotations. Contractors submit tenders, usually quoting a rate lower than the estimated rate, but in exceptional cases it may be higher. Normally the lowest rate is accepted and finalised. An official order, commonly known as work order, is issued after finalisation of the tendering process. Execution of work is the next stage and running account bills, with the progress of work, are prepared and placed for payment. The last running account bill is the final bill and this is issued on completion of work.

Objectives of the Control System

The main objective is to control the expenditure through the budgetary control system. It has already been stated that the National Municipal Accounts Manual recommends checking of budget availability at different stages (before undertaking any work, at the time of approval of bill, at the time of accruing expenditure). In addition, there are some other considerations before the local bodies can consider the control system to be effective:

- a. one time budget availability checking.
- b. confirmed order on finalisation of tendering process.
- c. confirmed payment after placing of bill.
- d. observing budget availability norm.
- e. generating information for preparation of revised budget or budget for the next year.

Let us take an example from usual practices: an urban local body provides for R800 under a line item in the annual budget. An amount of R790 has already been incurred and paid (backed by an appropriate order). After payment of R790, the unencumbered balance is R10 (800-790).

Another bill of R20, for which an order has been issued, comes for payment, but the balance left in the budget for this line item is not sufficient for the payment. The urban local body has to issue a work order of R15 as the tendering process has been finalised and has issued a notice inviting tenders for work valued at R10. The final transaction could still be paid, but the others would require virement or a revised budget before payment can be authorised. This example is considered further below.

Need for Separate Budgetary Control

Is there any necessity for the accounts department to have any separate control measure for budget monitoring when a system of accounting, whether cash or accrual, is in place? “The ability to control expenditures depends on the accounting system for monitoring revenues and expenditures” (Thurmaier, 2007, pp. 276). Therefore it is necessary to examine the extent to which an accounting system can control the expenditure. The accounting basis (cash or accrual) has been determined by the method of budgeting used in the public sector in many countries (Hughes & Minovski, 2004). The accrual basis of accounting has become compulsory for Indian urban local bodies though some of these still follow the cash based accounting system (National Institute of Urban Affairs, 2010). Therefore analysis to achieve the desired objectives through accounting control, both cash basis and accrual basis, may be made as follows:

1. Cash basis of Accounting:

Under the cash basis of accounting expenditure is recognised on payment and therefore the control is exercised at the time of making payment against any line item in the annual budget. As the control is applied at the time of making payment, the local body will not be able to make the payment of R20 in the above example as it exceeds the unencumbered balance of R10. Therefore control under the cash basis of accounting or at the time of making payment does not ensure a situation that all the payments, whenever and whatsoever, will be made within budget availability. However, this may be over-come by having an additional control at the ordering stage to ensure that goods or

services are not ordered unless there is an adequate unencumbered balance in the relevant line budget. This is termed commitment accounting.

2. Accrual basis of accounting:

Expenditure is recognised when bills are received on the basis of progress of work undertaken. A liability is booked after the verification of the bills. In the above example R790 has already been recognized as expenditure and a pending bill for R20 will not be allowed to be booked as a liability as it exceeds the amount of the unencumbered balance of R10. Budgetary control under the pure accrual basis raises an issue of whether the liability, in the case of non availability of budget allocation, will be accounted for or not. So there is a conflict between the principles of budgetary control and accrual basis of accounting.

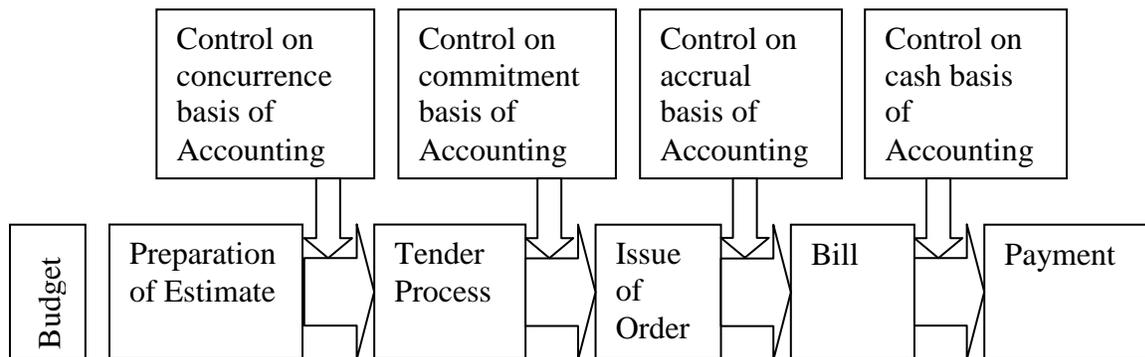
Thus accounting control alone can not provide for an appropriate level of control and there is a need for separate budgetary control mechanism. In order to develop a control system it is necessary to identify the appropriate stage at which the control will be applied.

Identifying the Stage for Initiating Control

“In past decades, there have been various innovations in budget formulation and operational efficiency of budgets in but there is still a considerable debate among PFM specialists about whether, when and how to implement them” (Simson R and others, 2011, pp.4).

Therefore first task is to identify the stage for initiating the control. As the accounting system alone can not produce the desired result, the control system should be at an earlier stage than of receiving bills. Therefore commitment control is applied at the time an order issued and before a bill is received or the payment is made. With effective commitment control, there should be adequate budgetary provision for the eventual payments for every order which is issued. In the above example, if commitment control had applied, it would have prevented the issue of an order for the amount R20, but it would not prevent a situation when an order is issued if the tender process is finalised. “The suitable choice of the control criteria, of the control techniques and methods contributes decisively to achieving the set objective” (Leter and others, 2007, pp.31). So to be effective, commitment control would have to apply before the tender process is started.

Figure 4: Stages for application of different controls



We propose:

(a) to implement a control system, as a part of budgetary control, after preparation of estimate and before administrative approval and our suggested control is a replacement of commitment control,

(b) to introduce the system of obtaining financial concurrence as suggested in the report of the Comptroller and Auditor General of India as a part of the control system and

(c) to replace commitment accounting by concurrence accounting.

Introduction of a System of Financial Concurrence

A fully developed control system has the objective of giving full control to the accounts department and ensures that they receive the information they need at the very first stage of each financial transaction. As the Comptroller and Auditor General of India recommends, we suggest that financial concurrence (or agreement) should be obtained from the accounts department immediately after an estimate for work has been prepared and before the tender process starts.

An estimate for work, for the purpose of this paper, may be termed as a proposal for expenditure. Financial concurrence means financial approval for a proposal for expenditure within the budget. This will ensure budgetary compliance when an order is later issued, but also when the final payment is made.

This practice requires that the relevant department, in respect of each and every proposal for expenditure, should obtain financial concurrence (approval) from the accounts or finance department before sending it for administrative approval (after the estimate has been prepared). Normally an official file is prepared in respect of the work and all the documents are preserved in it. Categories of government expenditures are coded and given expenditure heads for the purpose of expenditure control (Omolehinwa & Naiyeju, 2012). The National Municipal Accounting Manual also states that it is advisable to have the budgets prepared at the detailed level to ensure budgetary control. Therefore a proposal for expenditure should be forwarded to the accounts department, with the appropriate accounts code, by the concerned department and the accounts department will then provide financial concurrence, but only if the unencumbered balance of the budget is more than the amount of the possible expenditure.

Introduction of Concurrence Accounting

An accounting system which recognises a transaction at the point in time when financial concurrence is provided may be termed concurrence accounting. This is a part of a budgetary control system and it provides for the most effective control of future spending at the earliest point i.e., at the time of initiating a process that will lead to expenditure.

As an effective tool of expenditure control, the functionality of a financial management information system (FMIS) should include a well designed commitment control system for

accurate and timely recording of all commitments and expenditure. The operation of the system can substantially be improved through computerisation (Radev & Khemani, 2009). Similarly we recommend that financial concurrence is recorded in the IT system.

The system of concurrence accounting should be introduced and record the following:

- (i) accounts code
- (ii) amount of opening unencumbered balance under the respective accounts code
- (iii) amount of concurrence sought for the proposed expenditure
- (iv) amount of closing unencumbered balance [(ii)-(iii)].

If the closing balance (iv) is positive a proposal may be accepted, financial concurrence provided and a number named as “FC Number” be allotted. This number should be recorded in the file and on each document subsequently prepared. If (iv) is negative the proposal for concurrence should be rejected.

Example: There is budget provision of R800 for the “Repair and Maintenance of Road” budget line. The Public Works Department, after preparation of estimates (proposals for expenditure) of individual works and before getting administrative approval for them, will send the files to the accounts department for financial concurrence. The accounts department will act in the following manner:

Figure 5: Example of Concurrence Accounting

		Works						
		1	2	3	4	5	6	7
a	Amount of opening unencumbered balance	800	510	350	165	10	10	0
b	Amount of the proposed expenditure	290	170	195	150	20	10	15
c	Unencumbered Balance (a - b)	510	340	155	15	-10	0	0
d	Financial Concurrence to be accorded?	Yes	Yes	Yes	Yes	No	Yes	No

The accounts department may accord financial concurrence if this results in a positive or zero unencumbered balance. Financial concurrence may be accorded at a later stage depending on the result of subsequent developments as described in Figure 5.

Concurrence control is the combination of the process of giving financial concurrence to a proposal of expenditure and accounting of these financial concurrences.

Integration of Budgeting and Accounting

Preparation of the annual budget becomes merely a statutory requirement unless budget monitoring is done in a proper manner. Financial control can be established through budget monitoring and financial accounting should reflect and report on this monitoring. Actual spending should be monitored against budget to support the crucial form of financial control (Jones, 2007). A close relationship should exist between the accounting systems and budgetary systems to identify whether funds are expended in the manner desired by the legislature (Budget Reporting, Research Report, 2004). Therefore there is a need for close integration of budgetary

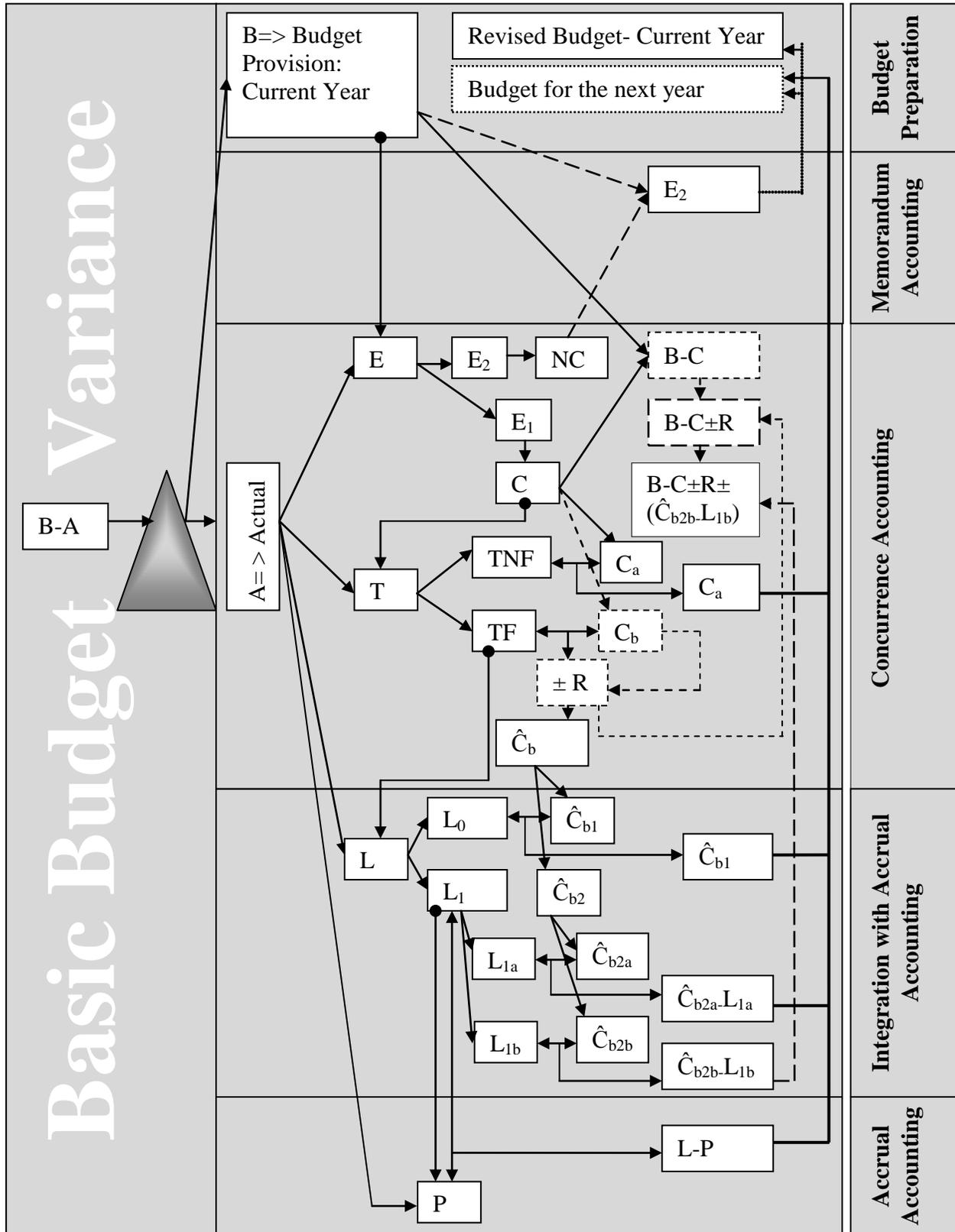
and accounting functions as these are complementary elements of financial management (Onumah & Samuel Nana Yaw Simpson, 2008). In our case concurrence accounting and financial accounting need to be integrated for effective budgetary control. The benchmark for budget execution is to use the budget document as a tool for planning, procurement and expenditure control and so it is essential to link the budget with the accounting system (Synthesis report, 2006). The National Municipal Accounting Manual suggests the adoption of accrual accounting, but we believe that budgetary control under accrual accounting will be ineffective unless concurrence accounting is implemented.

Developing the Prism Model

Some of the urban local bodies still use cash based accounting systems, but they are all required to switch to the accrual basis. The combined system is then said to become more transparent and user-friendly (NIUA, 2010, pp.11). Thus we would argue that concurrence accounting should be integrated with accrual accounting.

We try to analyse the variances and find that seven considerations emerge from the following model:

Figure 6: Prism model



Analysis and Explanation

Analysis of variances is acknowledged to be an important in identifying the reasons which caused them. Managers should then be able to take suitable action (Jackob, 2003). Budget variance is the comparison of actual (real) result with budgetary provision. This is the basic budget variance (B-A) where B is the amount of the budget provision and A is the actual result.

If the cash basis of accounting is used, the actual result is the amount paid (P) and the variance or unencumbered balance is B-P.

The liability (L) is considered in place of the payment, when accrual accounting is followed, and the unencumbered balance is then derived from B-L.

a. Concurrence Accounting:

The accounts department, after receiving a proposal for expenditure (E), has to compare it with the budgetary provision (B) and may provide financial concurrence (C) to the proposal (E_1) which is within the budgetary provision. Financially concurred expenditure will be allotted a FC number and therefore E_1 cases are named as C.

The unencumbered balance, in respect of any line item, will be B-C. No financial concurrence (NC) will be given to any initiated expenditure (E_2) during a year which exceeds the amount of budget allocation/ unencumbered balance. A dummy or memorandum accounting entry may be made for recording these proposals which are not authorised (E_2).

Next stage is the tendering process (T) where financial concurrence (C) is provided. There are two categories:

- (i) tendering process has not been finalised (TNF)
- (ii) tendering process has been finalised (TF).

The amounts provided with financial concurrence are then categorised as C_a and C_b accordingly.

The amount of financial concurrence (C_b), given on the basis of the estimate prepared may vary on finalisation of the tendering process which is denoted as $\pm R$.

If a tender is subsequently cancelled, the value of the finalized tender will become zero and $\pm R$ will be equal to minus C_b . This $\pm R$ has dual impact:

- a. Revision of concurred amount: the relevant department will send information about this to the accounts department and the total of C_b cases will be revised to \hat{C}_b .
- b. Revision of unencumbered balance: This difference has also impact on unencumbered balance and it is to be recomputed as $B-C\pm R$.

After finalisation of the tender process the work order will be issued and work execution will commence. The accounts department will receive the bills on the basis of the progress of the work. *Concurrence accounting ends here and financial accounting begins.*

b. Accrual Accounting:

Under the accrual basis of accounting, a transaction is recognised when the associated goods and services are used or when the activity which gives rise to revenue takes place. The receipt of an invoice is often accepted as a proxy for use of goods and services and revenue is usually recognised when received. Cash is an inherent feature of the accruals and therefore transactions under accrual basis are recorded both on an accruals basis and on a cash basis (Blöndal, J.R, 2005). In our case, the accrual basis of financial accounting records the liabilities on the basis of bills placed. The amount of liability (L) gradually decreases with making payments (P) and balance of liability is denoted by L-P.

Further analysis below is based on integration of concurrence accounting and financial accounting.

c. Integrating Concurrence and Accrual Accounting

The most frequently used control in economic and financial practice is the control of accounting documents and correlating these documents with other facts of mutual influence (Lefter and others, 2007). Therefore the accounts department will use the control of accounting documents (bills) and correlate these documents with the facts of concurrence accounting as both have a mutual influence. The accounts department, with the progress of capital works, receives bills from the contractor and books the liabilities. Works are deemed to have commenced during the financial year if any running account bill is received by the accounts department. This department has to segregate works on the basis of their commencement and to segregate concurrences (approvals = \hat{C}_b) on the basis of bills received.

There are two categories here:

- (i) either no liability as no bill has been placed (L_0), or
- (ii) liability as bills have been placed (L_1).

The C_b cases, where financial concurrence has been given, are similarly divided into C_{b1} and C_{b2} for L_0 and L_1 respectively to denote where a liability has been recognised.

The final bill in respect of any works, indicates that the work has been finished. Where such a bill has not been received, it is considered unfinished at the end of the year. Thus we have two further categories of works:

- (a) unfinished work (final bill not placed) during the year (L_{1a}) and
- (b) finished work (final bill placed) during the year (L_{1b}).

The financial concurrences (\hat{C}_{b2}) then need to be divided as follows:

- (a) financial concurrences for unfinished work during the year (\hat{C}_{b2a}) and
- (b) financial concurrences for finished work during the year (\hat{C}_{b2b}).

At the end of the year, there will be balances of financial concurrences (approvals) where bills (invoices) have not been received, these will be analysed as:

- (a) unfinished works - ($\hat{C}_{b2a} - L_{1a}$) – these need to be carried forward to the following year
- (b) finished works ($\hat{C}_{b2b} - L_{1b}$) – these concurrences lapse as the works are finished.

The unencumbered balance should be regularly recomputed. The revised unencumbered balance is $\{(B-C)\pm R\pm (\hat{C}_{b2b}\cdot L_{1b})\}$.

“The analysis completes the control with some aspects that cannot be pointed out by other control methods. The control cannot confine itself to finding the shortcomings. It is necessary to establish the level and the dynamic of the examined phenomena, the factors that influenced the evolution of the controlled phenomena, the correlation between these factors and the phenomena” (Lefter and others, 2007, pp. 35)

Details of Seven Considerations

We get seven cases from the prism model. These help the accounts department in the matter of expenditure control through budgetary control during the year, preparation of revised budget and preparation of budget for the next year.

Figure 7: Details of seven considerations

Name of Considerations (author's own terms)	Why arises	Meaning	Why important
		Presentation in the Model	What effect
1. <i>Coverage Concurrence Balance</i>	Unencumbered balance is renamed. It reduces gradually as financial concurrence is given.	It is the difference between the budget provision and the adjusted value of the outstanding financial concurrences.	This indicates the balance of the annual budget which is available for the provision of further financial concurrence.
		$[B-C]=> [B-C\pm R]=> [(B-C)\pm R\pm (\hat{C}_{b2b}\cdot L_{1b})]$	It denotes the available balance for giving financial concurrence to subsequent proposals for expenditure.
2. <i>Coverage Concurrence Denial</i>	When the amount of a proposal for expenditure exceeds the “Coverage Concurrence Balance”.	Amount of proposal for expenditure during the year which is not financially concurred.	Accounts department should apprise the relevant manager that a sufficient budgetary balance is not available.
		E_2	The amount may be provided either in the revised budget or in the budget for next year, under the respective line item.
3. <i>Concurrence Non-finalised Tender Roll Over</i>	When tendering process is not finalised during the financial year.	The amount of financial concurrence for which tendering process has not been finalised.	This rolls over to next year as the work will be executed after finalisation of tendering process in the following financial year.
		C_a	The amount is to be provided in the budget for the next year under the respective line item.
4. <i>Concurrence Non-Commencement Roll Over</i>	When no bill (invoice) has been received in respect of works which have financial	Amount of financial concurrence relating to work which has not commenced as no bill has been placed during the	This rolls over to next year. Bills will be placed in the next year with the progress of work till completion. Expenditure will be recognised and liability will be

Name of Considerations (author's own terms)	Why arises	Meaning	Why important
		Presentation in the Model	What effect
	concurrence.	year.	booked as and when bills will be received.
		\hat{C}_{b1}	The amount is to be provided in the budget for the next year under the respective line item.
5. <i>Concurrence Claim Roll Over</i>	When bills have been submitted but these bills do not include final bill.	Work remains unfinished as final bill is not placed during the year. This is the difference between the amount of financial concurrence and the amount of bills placed.	This rolls over to next year. Bills for the remaining portion of the work will be placed in the next year. Expenditure will be recognised and liability will be booked as and when these bills are received.
		$\hat{C}_{b2a} - L_{1a}$	The amount is to be provided in the budget for the next year under the respective line item.
6. <i>Concurrence Claim Correction</i>	When final bill of works is submitted.	Work is finished with placing of final bill. This is the difference between the amount of financial concurrence and total amount of bill for the finished work.	This has an impact on the amount of the coverage concurrence balance. This balance will be corrected accordingly as there is no further effect.
		$\hat{C}_{b2b} - L_{1b}$	The amount of coverage concurrence balance will stand at “[$(B-C) \pm R \pm (\hat{C}_{b2b} - L_{1b})$]”.
7. <i>Claim Complement Roll Over</i>	When bills are not fully paid.	Difference between the amount of bill and payment.	This rolls over to next year. Further, the amount is important for reconciliation purpose with amount of liability segregated at different stages.
		L-P	The amount may be provided under liability in the budget for the next year.

The existing budgetary control system is extended to a new system of control which results in a model consisting of seven new considerations like a ray of white light (existing) passes through a

prism and emerges as combination of seven colours (considerations). Therefore we name this model as the *Prism Model*.

The model and the considerations are explained further with the following example:

Figure 8: Example explaining “Prism Model”

Name of Work	W1	W2	W3	W4	W5	W6	W7	TOT
Budget Provision Remaining	800	510	350	165	10	10	15	800
Proposal for Expenditure (E)	290	170	195	150	20	10	15	850
1. Coverage Concurrence Balance (B-C)	510	340	155	15	-10	0	0	
Expenditure Concurred (E1->C)	290	170	195	150	0	10	15	830
2. Coverage Concurrence Denial (E ₂)					20			20
3. Concurrence Non-finalised Tender Roll Over (C _a)							15	15
Tender Finalised (C _b)	280	160	200	150		8	N	798
Rectification (R)	10	10	-5	0		2		17
Revised Financial Concurrence (Ĉ _b)	280	160	200	150		8		798
±R Effected	0	10	10	-5	0	0	2	17
1. Coverage Concurrence Balance [B-C±R]	510	350	165	10	-10	0	2	
Bill Placed (L)	265	160	180	140				745
Liability for Unfinished Work (L _{1a})			180	140				320
Liability for Finished Work (L _{1b})	265	160						425
Financial Concurrence for (L _{1a}) = Ĉ _{b2a}			200	150				350
Financial Concurrence for (L _{1b}) = Ĉ _{b2b}	280	160						440
4. Concurrence Non-Commencement Roll Over (Ĉ _{b1})						8		8
6. Concurrence Claim Correction (Ĉ _{b2b} - L _{1b})	15	0						15
Concurrence Claim Correction effected						15		15
1. Coverage Concurrence Balance [(B-C)±R± (Ĉ _{b2b} .L _{1b})]	510	350	165	10	-10	15	2	2
5. Concurrence Claim Roll Over (Ĉ _{b2a} - L _{1a})			20	10				30
Payment made (P)	265	140	180	130				715
7. Claim Complement Roll Over (L-P)	0	20	0	10				30

Conclusions

The National Municipal Accounting Manual states that the recommendations it makes are general and minimal requirements and that local bodies may add any other reports or forms which they consider necessary and suitable. Therefore this paper can be considered as an addition to the budgetary control concept outlined in the National Municipal Accounting Manual. As a result, local bodies should be able to better control their expenditure and avoid multi-stage budget availability checking.

We recommend that financial concurrence should be provided for all types of capital expenditure (public works).

According to Mbedzi (2010) public expenditure management entails:

- (i) appropriate planning and spending within the budget processes
- (ii) strengthening the expenditure control systems
- (iii) evaluating and monitoring the expenditure control systems and
- (iv) evaluating and monitoring effectiveness of established systems.

The control model, according to Thurmaier (2007), provides a good foundation for the larger discussion in respect of budget execution. We hope that our model will assist building the foundations for strengthened expenditure control with clear links between expenditure obligations and resource availability.

Local governments should try to improve their own financial viability as intergovernmental transfers will never be able to cover all the urban investment needs (MOUD, 2011). Expenditure control is an essential consideration for improvements to financial viability and we hope that our approach will help Indian urban local bodies to improve financial viability through expenditure control. Appropriate authorities in India may consider our approach for inclusion in the National Municipal Accounting Manual or in the respective budgeting manual so that it can be encouraged in Indian urban local bodies.

Though this paper is written in Indian urban local body's perspective but it can also be used in other countries where the system and nature of urban local bodies is similar.

We conclude our paper with two remarks:

- (i) "The call is for government accounting and its research to be seen in a new light to enable it to have a stronger and more positive influence on public financial management systems" (Onumah & Simpson, 2008, pp.14).
- (ii) "Many public expenditure management professionals are trying different approaches to their tasks. To better understand exactly what we do, we need to know how others do the same thing. We want to learn from their experiences both good and bad. We do not want to repeat their mistakes; but, more importantly, we want to learn "what works.

"We want to know how similarly-situated practitioners understand and attempt to meet the challenges that we face daily. Most professionals, whether they are involved in public expenditure management (or any career), want to do their work well and receive recognition for their accomplishments" (Vukicevic & Bartholomew, 2008, pp. 15-23).

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