1 Preparing budgets

this chapter covers...

In this chapter we begin our examination of the preparation of budgets.

We start by learning the purposes of budgets, and see how some organisations view particular purposes as more important than others. We examine how budget setting links with the organisation's objectives and strategy, and must be built around the key (or principal) budget factor – which is often sales.

Next we examine the various budgets that are usually prepared, and how they are sequenced. The key budget factor is normally forecast first, and the other budgets are based around this important data.

We then go on to examine the organisation of the budgeting process and the various roles of the budget committee and how individuals can participate. Next, we discuss some specific techniques that can be used to develop budgets.

We then move on to the numerical work involved in creating the budgets connected with a manufacturing organisation and how they fit together, including the master operating budget and the cash budget.

INTRODUCTION

In this book we are going to study the L4 unit 'Management Accounting'. The book will generally follow the order of the learning outcomes in the specification. This is the order of study that is recommended by the AAT. The first topics that we will consider relate to budgeting, and these are covered in the first two chapters in the book.

THE PURPOSES OF BUDGETS

A budget is a financial plan for an organisation, prepared in advance.

In any organisation the budget provides the mechanism by which the objectives of the organisation can be achieved. In this way it forms a link between the current position and the position that the organisation's managers are aiming for. By using a budget firstly to plan and then to monitor, the managers can ensure that the organisation's progress is coordinated to achieve the objectives of the organisation. The specific purposes and benefits of using budgets are as follows.

1 the budget compels planning

By formalising the agreed objectives of the organisation through a budget preparation system, an organisation can ensure that its plans are achievable. It will be able to decide what resources are required to produce the desired outputs, and to make sure that they will be available at the right time.

2 the budget communicates and coordinates

Because a budget will be agreed by an organisation, all the relevant personnel will be working towards the same ends. During the budget setting process any anticipated problems should be resolved and any areas of potential confusion clarified. All the organisation's departments should be in a position to play their part in achieving the overall goals. This objective of all parts of the organisation working towards the same ends is sometimes referred to as **goal congruence**.

3 the budget can be used to authorise

For organisations where control of activities is deemed to be a high priority the budget can be used as the primary tool to ensure conformity to agreed plans. Once the budget is agreed it can effectively become the authority to follow a particular course of action or spend a certain amount of money. Public sector organisations, with their necessary emphasis on strict accountability, will tend to take this approach, as will some commercial organisations that choose not to delegate too much authority.

4 the budget can be used to monitor and control

An important reason for producing a budget is that management is able to monitor the actual results against the budget. This is so that action can be taken to modify the operation of the organisation as time passes, or possibly to change the budget if it becomes unachievable. This is similar to the way that standard costing is used to monitor and control costs, and can be used alongside that technique, as we will see later in this book.

5 the budget can be used to motivate

A budget can be part of the organisation's techniques for motivating managers and other staff to achieve the organisation's objectives. The extent to which this happens will depend on how the budget is agreed and set, and whether it is perceived as fair and achievable. The budget may also be linked to rewards (for example bonuses) where targets are met or exceeded.

THE BUDGET CYCLE

The budget cycle can be used to describe the various processes that need to be undertaken to implement a budget. They are carried out in the order shown, and generally apply to both large and small businesses, as well as public authorities. You may come across slightly different terminology used in relation to the budget cycle.

- **budget preparation**

  This involves bringing together the various data that is required. It also means making sure that all the relevant people are involved. There are many decisions that will have to be made by the participants, and these issues will be examined more fully as we progress through this section of the book.

- **budget approval**

  For a large organisation, this will be a formal procedure as we will see later. For a small business, it could be an agreement by the relevant managers.

- **budget implementation**

  This means that the budget is active from the start of the budget period. All relevant procedures must be adhered to, and the responsibility and authority as detailed in the budget will be followed.

- **monitoring and evaluation of the budget**

  This is a crucial step, and for many organisations is a main reason for budgeting. The budget should be compared with actual performance, and the results reported and acted upon. This can lead to changes to activities, or possibly revision of the current or future budgets.

THE INITIAL STEPS IN BUDGET PREPARATION

the aims of an organisation

Before an organisation's managers can begin to build a useful budget, there are several initial steps that must be taken. These are based around the fundamental questions about the **aims** – the 'vision' – of the organisation:

'where do we want it to go?' and

'how do we get it there?'

These are essentially long-term issues, and once agreed upon would not tend to be changed very often.

objectives and strategy

For a budget to be of use to an organisation it must be a mechanism of helping the organisation achieve its **objectives**. The objectives are the targets that the managers of the organisation wish it to achieve. The way in which these objectives are expressed will depend upon the type of organisation and the way in which it operates. For example, a pet food manufacturer may have the specific objective of obtaining sales penetration of 25% of the UK dog food market, whereas an independent TV production company may have the objective of achieving a certain number of viewers on average.

The organisation must then develop a **strategy** for achieving those objectives. Several alternatives may need to be considered before the final strategy is decided upon. The pet food company mentioned in the above example may decide that it needs to develop and market a new food product for young dogs to help it to achieve its objective. The independent TV production company may have a strategy of producing pilots for ten new programmes each year from which it can then develop the most promising.

relevant data

Before any progress can be made in preparing a budget, relevant data must be identified and collected. We have already seen that information must be available about the aims, objectives and strategy of the organisation so that the budget that is prepared will be consistent with these. The following are examples of the types of data that can be used in developing the budget. The data is divided into data from internal and external sources.

data from internal sources

- **accounting information**

  This will include information about the accounting system (eg specific accounting polices) and how they will affect the budget, as well as data collected through the accounting system (for example, historical costs).

- **wage and salary information**

  The resource of labour is clearly fundamental to many organisations, and sufficient information must be available to incorporate as appropriate.

data from external sources

- **information about suppliers and availability of inputs**

  Information must be available about suppliers' ability to supply the inputs required by the organisation, as well as data about relevant prices. This issue may be relevant to the consideration of limiting factors and can also force revisions to the budget.

- **information about customers and markets**

  It would not make sense to plan to make goods or provide services that were not required in the market place. Information of this type is fundamental to developing valid budgets.

- **general economic information**

  The impact of the economy on projections is discussed later in this chapter. No organisation can exist in a vacuum and those preparing budgets must recognise the importance of the health of the economy in which they operate.

Information from all these areas will be needed at various points in the budgeting process that is described in this chapter and the next.

limiting factors – the 'key' budget factor

When an organisation prepares a budget, it must first analyse its **limiting factors** – the issues that determine the level of its output. For a commercial organisation these could include:

- the size of its market
- the capacity of its premises
- the availability of raw material
- the amount of working capital
- the availability of skilled workers

One of the factors will be the main one that affects the activity level of the organisation – **the key budget factor**. This is the factor (sometimes known as the 'principal budget factor') that all the aspects of the operation depend upon. For most manufacturing or trading operations the key budget factor is **sales**; the assumptions that are made about the level of sales in the budget will affect all the other parts of the budget. This is because the organisation will plan to support the budgeted sales level and build the budgets and assumptions around this one factor.

Although sales level is the most common key factor, some commercial organisations may decide that a different factor is the most important in their particular circumstances. For example, if a manufacturer can sell all that it produces, but has production restricted by lack of skilled labour, then the assumed labour level would become the key budget factor. A similar situation would arise if there were production restrictions caused by shortages of raw materials, or limited machine capacity.

Non-commercial organisations will also need to identify their key budget factor, and build their budgets around their assumptions concerning it. Charities and government agencies may consider that there is a demand for their services that is virtually limitless; their principal (key) budget factor is the amount of money they receive to fund what they do. For example, the Government's healthcare provision is limited by the amount of funding it can get from the government spending allocation and from private enterprise. The demand for Oxfam's aid is very high, but its key budget factor is the amount of money it can expect to raise to fund that aid.

There may be times when a limiting factor changes during a budget period as a result of changing demand or availability of resources. The issues of dealing with limited materials, labour and production capacity are examined later in this book.

the initial budgeting process

If we combine the ideas just discussed then the initial budget process for an established organisation would follow the pattern in the following diagram:

the initial budgeting process

review the organisation's objectives

▼

review the organisation's strategy for achieving its objectives

▼

identify all of the organisation's current limiting factors

▼

identify the key budget factor

▼

forecast the level of this key factor

▼

build the budgets around this forecast

ORGANISATION OF THE BUDGETING PROCESS

the budget manual

For most organisations, budget setting forms a vital part of the formal procedures: the organisation's method of budgeting will be set out in writing in its policy documents. These will include details of responsibilities and timetables. They may be combined into a **budget manual**.

The budget manual can be used to explain the 'why?' and the 'how?' of the organisation's approach to using budgets. It may include the following:

- the primary purposes of budgets for the organisation
- the types of budget that are to be produced
- what format is to be used for budgets
- how far in advance budgets are to be set
- who has responsibility for setting budgets
- who has responsibility for monitoring performance against budgets
- how often performance is to be monitored against budgets
- who has the authority to modify agreed budgets

the budget committee

The budget procedures may be the responsibility of a budget committee, chaired by the Managing Director or a person he/she has appointed. The composition of the committee may be set out in the budget manual, together with the committee's responsibilities. The budget committee may have the authority to modify the budget manual.

The committee will consist of senior representatives from all the departments, so that there is full communication and coordination throughout the organisation. This way, there should be full understanding about the overall objectives of the organisation, and the part that each department must play in the total picture. It would not make sense for the marketing department to plan a promotion of a product that the production department could not supply in sufficient quantities. This concept of everyone working towards the same result is referred to as 'goal congruence'.

It is important that all budget proposals are agreed with the budget holders, and because of the way it is comprised, the budget committee is an ideal mechanism for ensuring that this happens. Without agreement, a budget is unlikely to form an effective tool. There must be opportunities at both the forecasting stage and the budgeting stage for relevant individuals to raise any queries and seek clarification of the data. Only by this process will all budget holders feel that they fully understand the budgets and the forecasts on which they are built.

The committee will not only set and agree the budget, but it will also be responsible for monitoring the budget once it is in place. For example, it may wish to monitor on a quarterly, monthly, or weekly basis, and will also want to decide on how quickly the information should be available and in what format.

It is important that the information produced in both the original budget and the subsequent monitoring reports is in a form that satisfies the needs of budget holders. The majority of the budget holders will not have accounting backgrounds, and the budget committee must carefully choose formats so that all users can understand and make full use of the documents.

In organisations where there is no formal budget committee, alternative ways must be used to ensure that budgets are fully agreed and coordinated, and that they are presented in a form that meets the needs of budget holders. In small organisations this responsibility may fall to the person who fulfils the role of management accountant, so they must be careful to carry out these duties effectively.

budget timetables

There are two main types of budgets used by organisations:

- **strategic** budgets
- **operational** budgets

They have different purposes, and are each based on different timescales. The budget committee will typically determine the way that these budgets are set and monitored, in line with the budget manual.

Strategic budgets will be produced well in advance of the period to which they relate. They are concerned with the long-term strategy of the organisation, and will therefore have the following features:

- they relate to long periods of time (typically five years)
- they are prepared a long time in advance of the budget periods
- they are limited to outline information and are not set out in great detail
- they are the responsibility of the senior management of the organisation

Some organisations may adopt a rolling programme of strategic budgets, perhaps five years ahead. Each year a further year would be incorporated into the far end of the budget.

Operational budgets will be produced for shorter periods of time – typically the next twelve months. They may be developed from the original strategic budgets for the budget period, but will take account of the fact that the business has information – facts and figures – about the immediate future. Operating budgets will therefore have the following features:

- they relate to short periods of time (typically the forthcoming year, divided into manageable control periods)
- they are agreed a relatively short time in advance of the budget period (typically several months before the year starts)
- they are set up and agreed in considerable detail
- they are the responsibility of the middle managers that control the operations of the organisation

capital expenditure budgets

The overall strategic and operational budgets must include **capital expenditure budgets** as well as revenue budgets. Capital expenditure can range from straightforward replacement of equipment, to moving to new premises or acquiring whole businesses. Capital expenditure can be defined as expenditure on assets that will benefit the organisation over more than one accounting period. In addition to following this general rule, many organisations will also set out a minimum cost of assets that are to be treated as capital. This is to avoid low value items that appear to satisfy the definition being treated as capital (for example, a calculator or an electric kettle). The minimum cost of a capital item could be set at, say, £200, or for a larger organisation, perhaps £2,000. This amount would be set out in the organisation's policy documents. The coordination of the capital expenditure budget is particularly important to ensure that:

- replacement equipment is acquired at the most cost-effective point for the organisation (before the old equipment becomes too costly to maintain, but not until the replacement is justified)
- planned production output that relies on capital expenditure is properly incorporated into both the appropriate revenue budgets and into the capital expenditure budget
- other resources are available to coordinate with the capital expenditure (for example, installation, raw materials to cope with increased output)
- the labour requirements are available, and the workforce suitably trained
- suitable funding has been obtained to meet the capital expenditure
- appropriate planning has been carried out to phase in the use of the new non-current (fixed) assets

effective budgeting

The budgeting system must involve honesty, openness and transparency if it is to be effective. The system must be fair to all participants, and also be seen to be fair. Where decisions have to be made by senior managers about projects to be funded and the level of support to be provided to departments, the decision making process must be clearly laid out and then followed by all concerned. The opportunity for managers to feel that they have been badly treated by the process must be minimised by ensuring that the entire system is transparent.

For example, suppose the distribution manager has requested capital expenditure to replace the delivery vehicles, and the production manager has requested that some outdated manufacturing equipment also be replaced. If resources are limited, the procedure for deciding which capital expenditure should have priority should be objective and transparent and based on the best result for the whole organisation. In that way there can be no accusations of favouritism.

Where systems are not open and transparent, individual managers who feel that their projects or requests have not been treated fairly are likely to become disillusioned and demotivated. Similarly, if a manager is believed to have submitted over-optimistic forecasts in support of a project that he/she is advocating, then grievances may be felt by other managers. There may be a role for the budget accountant in ensuring that data submitted is accurate and can withstand independent scrutiny.

participation in budget preparation

A participative budget system means that those who will have to work to a particular budget are involved in its preparation. They are consulted throughout the process, so that they can input their specialised knowledge of the work involved and contribute to the planning process involved in budgeting. This is sometimes described as a 'bottom up' style of budgeting, as opposed to 'top down', which would refer to the situation where the budget is imposed on people by higher levels of management.

The main advantages of participative budgeting are:

- the budget takes account of information from those with specialised knowledge
- those involved will have improved awareness of organisational goals
- those involved will accept the budget and be motivated to work to it
- coordination and cooperation between those involved will improve
- participating in budget preparation broadens their experience and develops new skills
- participation in budget setting gives those involved a more positive attitude towards the organisation and this leads to better performance

It should be noted, however, that these advantages depend on the participation being genuine: if people are consulted, but their opinions later appear to be ignored, the effects will be the opposite of those listed above. (This is sometimes referred to as 'pseudo-participation'.)

Supporters of the idea of participation in budgeting may point to apparent improvements in performance as 'proof' of its motivating effect. However, coincidences can occur, and the improvement may have happened for some other reason: favourable cost variances can result from suppliers reducing their prices, for example, or sales volumes might increase because of purely external factors like changes in the weather.

Another reason for favourable results may be the introduction of **budgetary slack.** This means that managers have succeeded in obtaining a budget based on an over-estimation of costs or an under-estimation of income. They are then more likely to be able to achieve a good level of performance when measured against the budget. An argument against participation could be that it increases the risk of managers being able to introduce budgetary slack.

Research projects relating to participation in budgeting do not seem to have provided any firm conclusions about its motivational effects. It is not surprising that the effects seem to depend on the attitudes of the individuals involved, and different people react in different ways. Some employees may not want to spend time on budgeting, or may feel they do not have the necessary skills, so that participation would be seen as added pressure on them rather than an opportunity. They may feel that it is not part of their job, or that they have not been trained to carry out the task. Therefore, under some circumstances, an imposed ('top down') method of budgeting may be preferred.

Imposing a budget is also likely to be quicker than a consultation process, and sometimes the timescale will mean that a participative approach is impossible. Managers must be able to respond quickly to changing circumstances and maintain the progress of their organisation in the required direction. Part of this response may be to revise budgets at short notice.

THE MAIN TYPES OF BUDGET

Here we will briefly mention the main types of budget that you need to be familiar with. We will go into further detail regarding each type as we progress through our studies.

- **operating budget**

  An operating budget is a short- to medium-term budget (for example, covering a year). It deals with the immediate requirements of the organisation, and it provides the initial steps towards the long-term strategic budget. We will examine the preparation and use of operating budgets thoroughly in our studies.

- **capital budget**

  This budget deals with the acquisition (and possibly disposal) of the non-current assets that are required to support the organisation. This budget differs from the operating budget (which is a revenue budget), since it is concerned with 'one-off' transactions.

- **fixed budget**

  A fixed budget is one that assumes a certain level of outputs – often sales. The budget is then built around this output level. This type of budget is appropriate if the output level can be forecast with a degree of accuracy – for example, if there are sales contracts already in place. Even if there is uncertainty over the forecast output level, a fixed budget can be used for planning purposes, in combination with a flexed budget for monitoring and control.

- **flexed budget**

  A flexed (or flexible) budget is one where the **actual output** (for example, sales) is used as a basis for the budget. This is carried out by using knowledge of cost behaviour to adjust the budgeted costs in the original fixed budget into line with the actual output. This would be carried out after actual output is known. An alternative would be to produce a series of budgets in advance to cope with a range of possible output levels. We will practise preparing flexed budgets later in this book.

- **cash budget**

  A cash budget (sometimes known as a cash flow budget) will be produced alongside the other budgets to plan and control the movement of cash which occurs due to the impact of the other budgets. A cash budget will only incorporate receipts and payments that are cash-based, and it will incorporate both revenue and capital items.

APPROACHES TO BUDGETING

Separate budgets will be prepared for each function of the organisation (divided up if appropriate) and individual managers will be held accountable for their department's performance against their budget.

The following alternative approaches can be taken to preparing these functional budgets.

incremental budgeting

Preparing budgets using incremental budgeting is the traditional approach. It involves basing the budget for a period on the previous period's budget (or actual costs), and then making adjustments for anticipated inflation and any other expected changes. In this way, incremental budgeting produces a series of budgets over time that change only gradually. This provides consistency and security within the departments, and can avoid conflict between departments as resources are allocated based on agreed principles.

There are, however, disadvantages to incremental budgeting:

- there are no incentives for developing new ideas, or reducing costs. Managers may feel that they must spend all their budget to avoid it being reduced in future
- over time the budgets may become out of line with the amount of work carried out in the department, or the usefulness of that work
- if the departmental managers build in some 'budgetary slack' – by obtaining a larger budget than is really needed – then this may go unchallenged for many years

zero based budgeting (ZBB)

This method of budgeting takes the opposite approach to incremental budgeting. In each period the budget starts from a base of zero, with no account taken of the previous period's budget. Each cost that is agreed for the department has to be justified based on the benefit that will arise to the organisation from spending the amount allocated.

Often, alternative 'decision packages' are prepared for the department showing the costs that would be incurred to deliver certain levels of benefits. For example, alternative decision packages for a credit control section could involve:

- an option of a high level of interaction with debtors including active management of credit limits and a variety of appropriate actions on outstanding amounts to provide maximum receipts. This package would be labour intensive and expensive
- an option involving a lower level of interaction with debtors, with fewer options to use to chase outstanding amounts. The receipts would flow into the organisation more slowly and bad debts may increase, but the cost of running the department would be much less than the first option

The costs and benefits of providing each level of service would need to be analysed and a decision made based on the outcome that was best for achieving the organisational objectives.

The following are some advantages of zero based budgeting:

- it forces re-evaluation of the activities within each function, and how they contribute to achieving the organisation's objectives
- it encourages innovation and links the uses of resources to the achievement of results
- it avoids wastage and budgetary slack

However, there are some disadvantages:

- the process is very time-consuming and expensive to operate
- it may focus on short-term benefits at the expense of the long term (for example, when applied to training or marketing)
- the judging of decision packages may be difficult and subjective

One approach that could be taken is to rotate the use of zero based budgeting so that each budget centre does not go through the process each year. For example, a department may undertake a full zero based exercise once every five years, with incremental budgeting used in the other years. This would reduce the cost, but retain some of the benefits.

rolling budgets

Rolling budgets are used by some organisations. They consist of budgets that are continually extended into the future as time moves on. For example, a twelve-month budget could initially be prepared for 1 January to 31 December. As the organisation moves through January, the budget would be extended at the far end by a further month, so that a budget for 1 February to 31 January is created. This process would be continued each month (or other agreed period) so that there is always the same length of budget extending into the future.

This can provide improved accuracy and responsiveness compared to traditional static budgets, as information on actual performance can be fed into the budgets much more quickly. If necessary, the budget for the existing period (for example, February to December using our earlier dates) can also be updated when the budget is extended. Rolling budgets are particularly useful for organisations that operate in fast-changing environments.

The disadvantages are that budgeting becomes time-consuming (and therefore expensive) and there may be confusion over trying to achieve ever moving targets if the existing budgets are constantly updated. This can lead to demotivation and the danger of participants putting the minimum effort into the budgeting process.

COORDINATING THE MAIN TYPES OF BUDGET

Once the key factor has been determined, and an appropriate forecast developed, the budgets for the whole organisation can be generated. For a manufacturing organisation these would typically include:

sales budget	usually generated directly from the key factor – the forecast data

production budget	based on the sales budget together with the anticipated finished goods inventory levels
materials usage budget	based on the production budget
materials purchases budget	based on the materials usage budget, together with the anticipated materials inventory levels
labour utilisation budget	also based on the production budget
plant utilisation budget	this would show how the plant and machinery is used by the planned production level Note that the above materials usage, materials purchases, labour utilisation and plant utilisation budgets could alternatively be presented as schedules to the production budget.
functional budgets	to support the operation (often based on departments), for example administration budget, finance budget; these may not be so dependent upon the sales level as other budgets that are linked more closely
capital expenditure budget	this would also have to be developed in conjunction with the revenue budgets to ensure that the agreed spending on new or replacement equipment was in place
cash flow budget	this would take account of all the other budgets and their effect on the organisation's liquidity – note that this is not a functional budget, but is a part of the master budget
master budget	the calculations from all the revenue and capital budgets contribute to the **master budget** which takes the form of a budgeted statement of profit or loss and a budgeted statement of financial position together with a cash budget

The choice and format of the main budgets will need to be appropriate to the organisation.