Chapter 14

Control through budgeting

Real world case 14.1

This case study is arguing a case for replacing a budget model with something new. It is an enthusiastic statement from a group promoting its own new ideas. Read the case study now but only attempt the discussion points after you have finished studying the chapter.

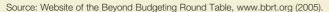
'Budgeting has few admirers'

Gaming the numbers is pervasive. One large survey of US companies concluded that managers either did not accept the budgetary targets and opted to beat the system, or they felt pressured to achieve the targets at any cost. This pressure is squeezing the life and spirit out of many organizations and their people. It's the mentality that says, 'Do what I say or your future is at risk.'

Beyond Budgeting, a more adaptive and devolved alternative

Replacing the budgeting model with a more

adaptive and devolved alternative is the solution that organizations need to achieve their goals of becoming devolved networks. Criticizing budgets is not new. But defining a set of principles that guides leaders toward a new lean, adaptive and ethical management model is a new idea – perhaps the first great new idea of the twenty-first century.



Discussion points

- 1 How can budgets be used for planning and control if managers are 'gaming the numbers' as described above?
- 2 How would a devolved approach reduce the 'gaming' by managers?



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Learning outcomes

After reading this chapter you should be able to:

- Explain and discuss the behavioural aspects of budgeting.
- Explain the application of flexible budgets in variance analysis.
- Explain methods of budgeting used in a range of organisations.
- Explain and discuss the views that have questioned the need for budgets.
- Describe and discuss examples of research results in the use of budgets and their effects.

14.1 Introduction

Chapter 13 has explained the budgetary process and illustrated in detail a method of preparing budgets for planning purposes. The use of budgets for control purposes was explained in that chapter in terms of comparing the actual outcome with the expected results as shown by the budget.

The use of budgets within an organisation may affect relationships and behaviour inside the organisation. This chapter discusses some of the potential problems and ways of avoiding or minimising them.

When actual costs are compared with budgeted costs, the comparison is of the total cost for the line item under consideration (e.g. cost of various types of material, cost of various categories of labour or cost of a range of categories of overheads). Where there is a significant difference between the budget and the actual outcome, that difference may be investigated. (It has to be remembered, however, that the investigation will itself have a cost.)

Budgets are particularly important for planning and control in the public sector (such as national and local government services, health services and education). This chapter explains some of the features of public sector budgets.

Finally, the chapter explains why some writers have questioned the need for budgets.

Activity 14.1

Real world case 14.1 starts with the heading 'Budgeting has few admirers'. This reflects the position taken by the Beyond Budgeting Round Table. What arguments could you present to support the usefulness of budgeting?

14.2 Behavioural aspects of budgeting

Chapter 13 describes the technical process of setting a budget. It emphasises the need for involvement at all stages of the process. In an ideal world that would produce the best solution. However, the world is not ideal and not everyone can be allowed to do exactly as he or she would wish at the first instance. So potential conflicts arise and those involved in the budgetary process need to be aware of the behavioural aspects in order to maximise the good points and minimise the problems.

The behavioural aspects may conveniently be summarised as relating to motivation, participation, feedback, group effects, budget slack and the politics of the organisation. In each of these areas there has been research into the effects, sometimes with inconclusive results. This chapter does not seek to give detailed reference to the research work, but rather to bring out some of the findings as points to consider in relation to the technical process.

14.2.1 Motivation

Chapter 13 suggests that budgets should help in performance evaluation because they provide formal targets against which to measure performance. If the targets are set with care, there should be motivation for the individual to achieve those targets. The question then arises as to what type of targets should be set. Relatively easy targets will be achieved by all, but they will know the targets were easy and will not feel fully motivated by that level of evaluation of performance. If the targets are moderately difficult, there will be a stronger motivation for some individuals to achieve those targets, with a sense of personal satisfaction in doing so. Others will fail and will become

despondent. They may decide not to put any further effort in because the targets are too difficult.

The literature on goal setting suggests that it is important that the budget targets are accepted by the individuals involved. In that context, budget targets should be at the 'difficult' end of the range, by way of creating a challenge, but should be seen as being attainable. If budget targets are unrealistic, there may be a negative reaction where the individual does not even attempt a reasonable level of performance. Communication between levels in the organisation is also important, so that the individual knows that achievement of targets is reported at a higher level and recognised in some form. Within all these considerations of positive factors of motivation, there may be personality problems which invalidate approaches which would otherwise be successful.

14.2.2 Participation

A full understanding of the behavioural aspects of the budgetary process requires an understanding of psychology. Research into behavioural aspects of budgeting has therefore included psychological studies of the individuals participating in the budgetary process. It is argued that individuals have needs for a sense of belonging, a sense of self-esteem and a sense of personal fulfilment. These needs do not necessarily have to be provided through remunerated employment or self-employment. They could be achieved through charitable work or dedication to a particular way of life. To the extent that people do spend a considerable part of their lives in paid employment, these needs may most readily be satisfied by that work.

Participation is one way of meeting those needs, and therefore participation in the budgetary process is a significant aspect of meeting human needs. Those individuals who participate in the budgetary process will gain a sense of ownership of the process, or belonging to the process. They will experience an increase in self-esteem through having a defined role in the process and will achieve a sense of personal fulfilment through successful implementation of the budget plans.

14.2.3 Feedback

Feedback on actual performance, as compared with the budget, is an essential part of the control process which follows from the setting of the budgets. Feedback is only effective if it is provided in a short time-frame. Good news is preferred to bad news; individuals may thus concentrate on the positive feedback and hope that the negative feedback will disappear. The information on negative feedback may have to be presented in a constructive manner if it is to result in action. For example, 'Sales this month were 10 per cent down' may be seen as a negative aspect about which little can be done after the event, but a statement such as 'Next month's sales effort must take account of the cause of last month's 10 per cent decrease' requires positive action in identifying and seeking to remedy the cause of the decrease.

Feedback must relate closely to the responsibility level of the individual if it is to encourage remedial action. There may be a personality problem here, as elsewhere, if individuals see the feedback as criticism of their work. That adverse reaction to criticism could be a function of age or insecurity. Negative aspects of feedback may need a different form of communication from that needed for positive aspects.

14.2.4 Group effects

The impact of the budgetary process on a group of persons may be quite different from the impact on the individual within the group. Participation by individuals will lead to greater group interaction, which will be a good thing if the individuals value their membership of the group and see the goals of the group as being collective targets that they all regard as desirable. Such a group will show cohesion, which will be increased by participation in the budget process.

Where a group does not have such cohesion, or the majority pressure is towards lower targets, the performance of the individual may be reduced by participation within the group. It may therefore be important for senior management, wishing to make effective use of the budgetary process, to have careful regard for the composition of groups within the organisation.

14.2.5 Budget slack

Where budgets are used to measure performance, the managers who set those budgets may be tempted to build in some element of spare resources that allows a lapse from actual high levels of performance without deviating from budget targets. The element of spare resources could involve overestimating the time required for any particular task, or using the highest price of input materials available in the price list, or asking for more equipment than is strictly necessary. Quite apart from such deliberate creation of slack there could also be unintentional errors such as planning activity for 52 weeks in the year when the premises are only open for 50 weeks.

Real world case 14.2

Lyne and Dugdale (2002) carried out a survey of the opinions of financial and non-financial managers of companies in the South-West of England. They asked the managers about the importance of a range of business uses. This table sets out the perceptions of the managers. Financial and non-financial managers gave similar answers.

Purpose of budgeting	Not very important, or almost irrelevant	Fairly important	Very important, or extremely important
	(%)	(%)	(%)
Overall	5.1	23.1	71.8
Planning	2.5	25.0	72.5
Control	5.0	20.0	75.0
Co-ordination	17.5	37.5	45.0
Communication	17.5	35.0	47.5
Authorisation	10.0	40.0	50.0
Motivation	37.5	30.0	32.5
Performance evaluation	12.5	22.5	65.0



Source: CIMA/ICAEW (June, 2004), p. 11, Presentation 3: 'Beyond budgeting or better budgeting', downloaded from www2.cimaglobal.com/cps/rde/xbcr/SID-0A82C289-878D454E/live/betterbudgeting_techrpt_2004.pdf.

Discussion points

- 1 What conclusions may be drawn here about the relative importance of planning and control as reasons for preparing budgets?
- 2 What conclusions may be drawn here about the relative importance of communication and motivation as reasons for preparing budgets?

The use of such bias at a lower level of budget preparation may be countered by a correspondingly strict attitude at a higher level to compensate for the built-in slack. That could be unfortunate for the lower-level manager who does not build in slack but is penalised along with the rest. The answer to this problem is that the process of budget setting should be specific as to input information so that built-in slack is identified at the earliest possible stage. Flexibility in budgeting is also important to ensure that where slack does become evident it is dealt with by budget revision.

14.2.6 Politics of the organisation

Irrespective of the type of entity, it is almost inevitable that there will be a political aspect to its management structure. The word 'politics' here refers to the power struggle within the organisation. It might be a power struggle in which labour unions seek to impose their will on management. It might be a power struggle within the board of directors or between divisions of the enterprise. Whatever its nature, such a power struggle is evidenced in the budget process where various units of the enterprise are engaged in rivalry over the formulation of the budget. Thus the budgetary process may be more important as a manifestation of the political struggle than as an item of financial planning.

There may be two aspects to budgeting: the public image of resource allocation, and the private image of resolving conflict. The first of these aspects involves a focus on the technicalities of providing information for resource allocation, to be studied as a starting point in exploring the use of budgets for planning and control. The second aspect forms a significant element of more advanced study in management accounting.

14.3 Flexible budgets and variance analysis

When the budget is set at the beginning of a reporting period, it will be presented on the basis of activity levels expected at that point. Suppose that activity levels subsequently fall because of a downturn in demand. Is it preferable to base the variance analysis on the budget set for the original level of output, or to introduce some flexibility and compare actual outcome with the budget adjusted for the new lower level of activity? Putting the question in that form leads to an almost inescapable conclusion that flexibility is required, but it is surprising how that obvious need for flexibility may be overlooked when a table of figures appears on a page. A case study is used in section 14.3.1 to show the application of a **flexible budget**.

The case study shows that there must be adjustment for the flexibility of variable costs as volume of output changes. Fixed costs do not vary because they are not affected by volume of output.

Definition

A **flexble budget** is designed to change when the volume of activity changes. The budget should be adjusted to match the actual volume of activity, for purposes of comparability.

When the actual outcome is known, the actual costs are compared with the budget. The difference between actual cost and budgeted cost is called a **variance**. If the actual cost is greater than the budgeted cost, the variance is called an adverse variance and written (A) in tables. If the actual cost is less than the budgeted cost, the variance is called a favourable variance and written (F) in tables.

Definition

Variance is the difference between actual cost and budgeted cost. If actual cost is greater than budgeted cost the variance is *adverse*. If actual cost is less than budgeted cost the variance is *favourable*.

14.3.1 Case study: Brackendale Ltd

Case study description

When the budget for the year ahead was set, it was expected that monthly output of units manufactured would be 10,000 units. By the time July was reached, output had fallen to 8,000 units per month because of a fall in market share of sales. Table 14.1 reports the original budget and the actual outcome for the month of July.

Data relevant to the month of July are set out in Table 14.1, as follows:

Table 14.1
Original budget and actual costs for July

	Original budget	Actual for July
Units manufactured	10,000	8,000
	£	£
Direct material	20,000	16,720
Direct labour	10,000	11,000
Variable overhead	6,000	5,600
Fixed overhead	_7,000	_7,500
Total product costs	43,000	40,820

Fiona McTaggart now talks through the problem.



FIONA: It is quite tempting to compare these two columns of figures directly and call the difference the cost variance. But that would be totally misleading because the budget is based on 10,000 units of output and the actual output was down to 8,000 units. Direct materials, direct labour and variable overhead are all variable costs which depend on the level of output. I would introduce a new column headed 'flexible budget' which shows the expected cost of all variable costs for the new output level. Finally, I would write a brief report setting out some guide to the figures so that the production supervisor can give some thought to possible causes.

The summary statement of variances (*see* Table 14.2) takes the information for original budget and actual costs contained in the case study description. The flexible budget is created by taking 8/10^{ths} of the original budget costs (because the units manufactured are 8/10^{ths} of the volume originally budgeted). The variances are then calculated by deducting the actual costs from the flexible budget figures. Italics are used to show the flexible budget figures which have been calculated as 8/10^{ths} of the original budget. The only exception is fixed overhead cost, where it would not be expected that the cost was variable. Accordingly there is no flexibility with regard to fixed overhead.

A summary report on the variances is shown in Exhibit 14.1.

14.3.2 Linking to the original budget

In Table 14.2 the variance is calculated by comparing the actual cost with the flexible budget. However, there is also a volume effect because the level of manufacture is less

Table 14.2
Using a flexible budget: summary statement of variances

	Original budget	Flexible budget	Actual for July	Variance
	(1)	(2)	(3)	(2) - (3)
Units manufactured	10,000 £	8,000 £	8,000 £	£
Direct materials Direct labour	20,000 10,000	16,000 8,000	16,720 11,000	720 <i>(A)</i> 3,000 <i>(A)</i>
Variable overhead Fixed overhead Total product costs	6,000	4,800	5,600	800 (A)
	<u>7,000</u>	_7,000	<u>7,500</u>	500 (A)
	43,000	35,800	40,820	5,020 (A)

Exhibit 14.1

Budget variance report

To: Production manager From: Management accountant Subject: **Variance report for July**

During the month of July there were 8,000 units manufactured, as compared with 10,000 expected when the budget was set. Allowing flexibility for the lower level of output, there was nevertheless an adverse variance of $\mathfrak{L}5,020$ for the month, of which $\mathfrak{L}720$ related to direct material, $\mathfrak{L}3,000$ related to direct labour, $\mathfrak{L}800$ related to variable overhead and $\mathfrak{L}500$ related to fixed overhead. The most serious of these is the labour cost variance, which may be due to rates of pay rising above expectations or it may be due to inefficient working. Further investigation is required, by enquiring into rates of pay authorised for staff, possible overtime payments and records of work carried out.

than expected. A further column could be inserted between columns (1) and (2) to show a volume variance. In some organisations there may be problems elsewhere because of the reduced level of output; this department has not met its targets and its cost savings may be offset by wastage or inefficiency elsewhere. So an evaluation of the effect of the change in volumes may be relevant to a larger discussion of the impact of a change in volume.

14.4 Methods of budgeting

Chapter 13 describes in detail the preparation of a master budget from its component parts. The preparation of each separate part of the master budget required information about the management's view of what activities would be carried out and what these activities would cost. Managers have to decide how they intend to describe the activities of the organisation and how they make projections of costs.

In designing the presentation of the budget, some organisations produce **line item budgets** where each line in the budget relates to functions in the organisation. This approach emphasises the *inputs* to the work of the enterprise.

In predicting the new levels of costs in the budget some organisations budget for the year ahead by an **incremental budget** adjustment to the current year's budget to allow for inflation and for changes in resource inputs. Others start each year with a blank paper and forecast each cost without regard to the current year's position. This is called a **zero-based budget**.

Rather than look at *inputs*, some organisations focus on planned *output* activities, each of which will use more than one of the organisational functions and present the

budget in the form of a planning programming budget system. An output-based approach may be particularly appropriate in a public benefit organisation.

This section explores each approach.

14.4.1 Input-based budget systems

The budgetary process described in this chapter has focused on the separate items which contribute to the overall budget. There will be a line for each item, such as direct materials, direct labour, various kinds of production overhead, various kinds of administration and selling and distribution costs. That type of budget is called a line item budget. The line item budget concentrates on the inputs to the process.

As an example, in the National Health Service the hospital services and support facilities are provided by NHS Trusts, each covering a geographical area. The Trusts must plan their budgets with regard for the objectives set by the government. As an example, Exhibit 14.2 sets out the financial objectives for one Trust.

Exhibit 14.2

Financial objectives for an NHS Trust

- 1 Taking one financial year with another, to ensure that a balance is maintained between income available to the Trust and expenditure properly chargeable against that income.
- 2 To achieve a surplus before interest of 6 per cent on average net assets.

The budget shown in Table 14.3 fails by £2m to meet the required surplus. Since there is another target of maintaining a balance, taking one year with another, we would now ask whether the previous year also fell below the required standard. If a trend of continuing deficits developed there would be some concern.

Table 14.3 Budget for next year

Sources of income	£m
For patient services	
Health Board	144
Other Boards	16
Education and training grants	_23
Total income from activities	<u>183</u>
Operating expenses	
Clinical services	120
Hotel services	6
Other support services	22
Transport and travel	2
Depreciation and amortisation	20
Research and development	4
Treesaren and development	174
Budgeted surplus	9
Required surplus to meet 6 per cent target	11

14.4.2 Incremental budgets

One commonly used approach to estimating the budgeted costs is to start with the previous year's expenditure budget, adding a percentage to cover inflation and making adjustment for any unusual factors or incremental changes. The success of the *incremental-budget* approach depended critically on the suitability of the previous

year's figures. Any errors in estimation would continue indefinitely. If there was inefficient use of resources in previous periods, that inefficiency will be built into the budgets. No challenges are made to separate departments to review their use of resources in a more fundamental manner. If a new activity has been developed it may be difficult for those involved to bid for support because there will be no previous budget on which to build.

The advantages of incremental budgeting are:

- It is relatively straightforward and low cost to implement.
- It will give a reasonable estimate where activities do continue relatively unchanged from period to period.
- It gives a continuing benchmark over a longer period of time.

The disadvantages of incremental budgeting are:

- It assumes activities continue at the current levels.
- It does not leave space for new developments.
- It is backward-looking and does not encourage innovation.
- It builds in inefficiency and discourages cost saving initiatives.
- It is seen as being driven by the accounting processes rather than by those who
 deliver the products and services of the organisation.

14.4.3 Zero-based budgeting (ZBB)

Zero-based budgeting was devised as a reaction to the traditional incremental approach to budgeting. Zero-based budgeting requires a completely clean sheet of paper every year. Each part of the organisation has to justify over again the budget it requires. Some thought-provoking questions may need to be answered, such as:

- What is the need for this activity?
- How much of it is needed?
- Is there a more cost-effective way of carrying it out?
- What is the optimal cost?

The approach is particularly useful for the output-driven approach to budgeting (see section 14.4.4) because it forces questions to be asked about the programmes planned and the cost–benefit aspects of the plans. On the negative side, it is a time-consuming activity and is perhaps most usefully applied on a selective basis where the questioning approach is most useful. Some activities of an organisation carry an element of discretion and it is worthwhile reappraising them on occasions. Others form an essential core, so that it might be less appropriate to take a zero-based approach.

The advantages of zero-based budgeting are:

- It encourages management to focus on the goals and objectives of the organisation.
- It forces management to consider whether activities continue to be necessary.
- It leaves space for new initiatives.
- It allows management to set priorities over the activities of the business.
- It gives an up-to-date benchmark to be used in evaluating actual outcomes.

The disadvantages of zero-based budgeting are:

- It is a time-consuming exercise.
- It requires management to apply higher skills in planning.
- It diverts managers' attention from their primary areas of responsibility.
- It could lose the benefit of longer-term comparisons of trends in efficiency and control.

14.4.4 Output-based budget systems

Rather than quantify *inputs*, it would be equally valid to approach the budgetary process from a totally different direction and concentrate on *outputs* from the process. An output-based approach could be taken by any organisation, but the greatest extent of its practical application has been observed in the non-profit-making organisations, where their activity output is the most important focus of their work.

An output-based approach to budgeting requires starting with an estimate of the quantity and quality of service to be provided. For the non-profit-making organisation the service output takes the place of sales for the profit-seeking organisation. Having defined the desired output the organisation then budgets to determine what will be required to achieve that output. If the organisation is a charity, it will then set about fund-raising. If it is central or local government, it will levy taxes. If the charitable funds available, or the tax revenues to be generated, do not meet all the requirements, then the output activities may be curtailed.

Such an output-based approach focuses on programmes of action. Various budgeting techniques have been suggested for dealing with output-based budgets. One such technique is planning, programming budgeting systems.

A planning, programming budgeting system (PPBS) is an approach that seeks to separate the policy planning aspects of budgeting from the short-term financial planning process. From the overall objectives, the organisation moves on to identify the programmes that will achieve those objectives. The costs and benefits of each programme are then identified so that they may be given relative priorities. Subjective judgement is required to select the most suitable programmes for implementation and the resources required are then allocated to those programmes.

The techniques of PPBS were advocated with enthusiasm in the USA for government budgeting in the 1970s, but by the 1980s had disappeared from favour. The reason was that, although the system sounds ideal, it is very difficult to administer because government departments are not organised by outcomes. They are organised on an input basis. In the late 1990s the state of Florida began new attempts to use programme budgets, with a focus on performance. As an example, the Department of Children and Family Services proposed programmes around specific groups such as persons with mental health problems. The agency then focused on achievement targets such as improving mental health, rather than on input targets such as providing specific hours of consultation. It was difficult to plan budgets forward on a programme basis because of the lack of adequately robust unit cost information. The budgets were mainly used as quantified confirmation that targets had remained within funding limits.

A programme to integrate into the community patients who have suffered mental illness may be taken as an example of PPBS. Such a programme will require the establishment of houses where the former patients may enjoy a degree of independence but will have access to help should it be required. That will involve a social welfare aspect and will increase the burden on the budget of the social services. The hospitals will have fewer long-stay mental patients and so will be able to close psychiatric wards. The health service will regard the corresponding funding as being released for other health service purposes such as acute medical care. Thus a programme which might be seen as having a positive social outcome may not result in a mutually amicable budgetary process where the two input departments are not under any constraint to work in harmony on achieving the overall objective.

The fact that PPBS has not always worked effectively in a government budgeting context may be due more to the organisation of government departments than to any intrinsic weakness in the concept. If the organisation's objectives are set in terms of programmes, then the organisational structure needs to reflect those programmes or it risks being ineffective if employees relate more closely to their input function than to the defined outputs. Real world case 14.3 shows how the National Health Service in

the UK is now using 'Programme Budgeting' as a retrospective appraisal of the cost of programmes that cross a range of input services.

Activity 14.2

Suggest one activity (or a collection of activities) for which PPBS would be particularly useful.

Real world case 14.3

In the National Health Service (NHS) in England, Primary Care Trusts (PCTs) are allocated funds by the Department of Health. The PCTs are responsible for the first line of patient care (e.g. when patients see their general practictioner). If the patient then needs hospital treatment (acute care), the PCTs then purchase ('commission') health care from the Acute Healthcare Trusts (which operate the major hospitals). (The system in other parts of the United Kingdom operates differently.) This extract describes the use of Programme budgets within the NHS in England.



- 11.7 Programme Budgeting is a retrospective appraisal of resource allocation, broken down into meaningful programmes, with a view to tracking future resource allocation in those same programmes.
- 11.8 Programme Budgeting had its roots in the Rand Corporation in the USA in the 1950s. Its first major application was not in healthcare, but for the US Department of Defence in the 1960s where it was used as part of a cost accounting tool that could display, over time, the deployment of resources towards specific military objectives. Such objectives were looked at in terms of wars overseas, the support of NATO or the defence of the homeland, instead of the conventional 'inputs based' budgetary headings of tanks, missiles or diesel fuel. Allocation of new resources, or shifts between budgets, could be judged on their relative contribution to these specific objectives.
- 11.9 Such an approach can equally be applied to healthcare. Instead of seeing investment on the level of a hospital or drug budget, the focus switches to specific health objectives or medical conditions. The aim is to maximise health gain through deploying available resources to best effect. Clearly, this aim complements the commissioning role of Primary Care Trusts.

Examples of programmes are:

- 8 Eye/Vision problems
- 9 Hearing problems
- 22 Social care needs

Source: Department of Health (December 2004) Programme Budgeting Guidance Manual, downloaded from www.dh.gov.uk/PublicationsAndStatistics.

Discussion points

- 1 What kind of health objectives might be evaluated in the area of 'eye/vision problems'?
- 2 Can the term 'budget' be applied to a retrospective (backward-looking) appraisal?

14.4.5 Public benefit organisations

In using budgets as part of their planning, organisations providing a public service must have regard to the conditions under which they operate. Such organisations could be public-sector bodies (town councils, government departments) or private-sector bodies (charities, educational establishments). Public benefit organisations are not normally seeking to make a profit in the way that a private business might. However, they will wish to avoid a deficit where cash paid out exceeds cash received. Very often they start the budget with a level of income that depends on government funding plans or on the decision of an external donor. The non-profit-making organisation, such as a local government organisation, an educational body or a charity, has to concentrate on managing its expenditure so as to match income and expenditure where both are measured using the accruals concept. Some of the examples provided in this section are from the public sector because public-sector bodies make more information available in public. Private-sector bodies regard budgets as commercially sensitive and usually do not disclose them to anyone outside the organisation.

14.5 Questioning the need for budgets

The 'Beyond Budgeting' Round Table (BBRT)¹ is a discussion group with members from several countries, whose aim is to help organisations achieve continuous improvement (see Real world case 14.1 for an extract from the BBRT website). Budgets are seen as a relic from the past that can no longer be improved. The complaints against budgeting are:

- It is too time-consuming.
- It is too expensive.
- It is out of touch with the needs of managers.
- It contains fixed targets and financial incentives which drive people to behave in ways that are not in the best interests of the organisation as a whole.
- It focuses on central command and control.

The organisations who have rejected budgets have moved to a system of performance contracts with rewards being based on relative performance measures rather than fixed budget targets. Forecasts are created on a 'rolling' basis with updating every few months so that there is never a 'year-end' budget. A forecast shows what will happen if specific assumptions are made. The forecast is compared with targets and goals to allow any gaps to be managed. The management philosophy is described as 'adaptive performance management'. The principles of adaptive performance management are:

- Set aspirational goals.
- Reward success based on performance.
- Plan continuously, not annually.
- Base controls on key performance indicators, not on variances from budget.
- Make resources available as required.
- Co-ordinate interaction dynamically, not through annual planning cycles.

In this approach, a customer focus is essential, and teams need freedom to act. Information should be open and shared across the organisation.

Activity 14.3

Read over this section again and think about the complaints against budgeting that are made by the BBRT. Decide whether you would support these complaints in a discussion.

14.6 What the researchers have found

This section summarises some of the research published on budgeting. Section 14.6.1 describes the 'better budgeting' initiatives. These are based on the view that 'better budgeting' is preferable to the abandonment of budgeting proposed in 'beyond budgeting'. Section 14.6.2 describes practical research into reasons for budgeting. Section 14.6.3 describes support for traditional budgeting. Section 14.6.4 discusses the links between budget participation and job satisfaction.

14.6.1 Better budgeting

A round table discussion was held in 2004 (CIMA/ICAEW 2004), organised by the ICAEW and CIMA. Those present debated possible ways of improving the budgeting process and highlighted areas for further research. The participants felt that formal budgeting was still a useful activity, despite all that has been written in the 'beyond budget' literature. They knew about the problems of budgeting but felt that the formal budgeting system and its related processes were indispensable. They felt that the budget provides a framework of control and a focus for co-ordinating activities within the business. Large companies would struggle to plan, co-ordinate and control without a budget, but even small companies need a road map showing their destination and how to get there. Budgets were seen as forward-looking and linked to strategic planning, with a relationship to forecasts. Forecasts were seen as high-level plans, with budgets showing more detail. The discussion forum concluded that budgeting was evolving, rather than becoming obsolete. Although the participants did not agree with abandoning budgets, they did feel that the criticisms of budgets had helped expose the problems and would lead to improvements.

14.6.2 Reasons for budgeting

Hansen and van der Stede (2004) investigated four potential reasons for budgeting to be used in organisations. The reasons they specified were: operational planning, performance evaluation, communication of goals and strategy formation. They sent questionnaires to 309 managers in US organisations. The managers were all members of the Consortium for Advanced Management International (CAM-I). The researchers received 57 usable replies. They found that these four reasons for budgeting are affected by different environments. Operational planning is a more prominent reason in a job-based environment than in a flow-based business process. Performance evaluation is the prominent reason where resources can be traced to products or outputs and there is a stronger element of competition for selling these products or outputs. Communication is the prominent reason where there is a job-based environment of products or services, strong interdependence between units of the organisation, and a stronger element of competition for selling the products or outputs. Organisations use the budget for strategy formation where they are divisionalised, pursue a strategy of differentiating their product or service, and operate in a job-based system with stronger competition for selling the products or output. The researchers also asked whether managers thought the budget approach performed well. Not surprisingly, the agreement was greatest where managers were satisfied with the budget process and their units had performed well against the budget set.

14.6.3 Support for traditional budgets

Ekholm and Wallin (2000) used a postal questionnaire to survey 650 companies in Finland. They found that 25 per cent of respondents had no plans to abandon annual

budgets but 61 per cent said that they were constantly trying to develop the annual budget to meet new demands. Only six per cent had abandoned the annual budget altogether. Another two per cent were in the process of abandoning it altogether and six per cent had considered abandoning it. The first two groups were classed as 'conservative' and the final three groups as 'radical'. The most common system in use appeared to be a hybrid system consisting of the budget, rolling forecasts and, in some cases, a balanced scorecard.

14.6.4 Budgets and job satisfaction

Chong, Eggleton and Leong (2005) examined the impact of market competition and budgetary participation on performance and job satisfaction. They received responses from 77 senior managers across the financial sector in Australia. They found that higher levels of market competition were related to the more positive relationships between budgetary participation and job satisfaction. They concluded that it seemed likely that the presence of market competition encourages more active monitoring and gives more opportunities for those involved to participate in setting budgets that are likely to help improve their performance. Where there is less competition, the outcomes are more predictable and budgetary processes have less of an impact.

14.7 Summary

Key themes in this chapter are:

- Budgeting may encourage co-ordination and communication. It may also have a
 positive or a negative impact on motivation, participation, feedback and group
 effects. The amount of budget slack may affect the behaviour of those implementing budgets. The politics of the organisation may have an influence on the nature of
 the budget and on its practical operation.
- The evaluation of outcomes against budget requires careful consideration of whether the comparison is valid. If the level of activity has changed since the budget was prepared, the budget must be revised so as to reflect the new level of activity.
- In public-sector organisations, cost control and value for money are important. Generally, profit is not important. The targets are economy, efficiency and effectiveness. Some public-sector organisations prepare line item budgets but these have the weakness of focusing on inputs. Programme budgeting focuses on programmes of outputs, where costs may be contributed from different departments and different line items.
- Some commentators have suggested that budgets hold back progress because what really matters is continuous improvement rather than waiting for periodic budgets and the cycle of activities related to preparing and implementing budgets. They call this 'beyond budgets'.
- Those who support continued use of budgets argue for 'better budgets' rather than 'beyond budgets'. The reasons for preparing budgets are linked to the nature of the business: different reasons are given for different types of budget. The link between job satisfaction and budget participation has been found to be stronger in situations of higher competition.

References and further reading

CIMA/ICAEW (2004) Better Budgeting: A Report on the Better Budgeting Forum from CIMA and ICAEW, July 2004, available on website www.cimaglobal.com.

- Chong, V.K., Eggleton, I.R.C. and Leong, M.K.C. (2005) 'The impact of market competition and budgetary participation on performance and job satisfaction: a research note.' *The British Accounting Review*, 37: 115–33.
- Department of Health (2004) Chapter 11 'Programme Budgeting Guidance', in *Manual for Accounts*, NHS Finance Manual.
- Ekholm, B.-G. and Wallin, J. (2000) 'Is the annual budget really dead?' *The European Accounting Review*, 9(4): 519–39.
- Hansen, S.C. and van der Stede, W.A. (2004) 'Multiple facets of budgeting: an exploratory analysis' *Management Accounting Research*, 15: 415–39.
- Hope, J. and Fraser, R. (2003) 'Who needs budgets?' Harvard Business Review, February.
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QUESTIONS

The Questions section of each chapter has three types of question. 'Test your understanding' questions to help you review your reading are in the 'A' series of questions. You will find the answer to these by reading and thinking about the material in the textbook. 'Application' questions to test your ability to apply technical skills are in the 'B' series of questions. Questions requiring you to show skills in 'Problem solving and evaluation' are in the 'C' series of questions. The symbol [S] indicates that a solution is available at the end of the book.

A Test your understanding

- **A14.1** How do budgets help with motivation? How might budgets discourage motivation (section 14.2.1)?
- **A14.2** Why is it considered important to have employees participate in preparation of budgets section (14.2.2)?
- A14.3 What kind of feedback is needed on performance against budget (section 14.3.3)?
- A14.4 How does negative feedback differ from positive feedback (section 14.2.3)?
- **A14.5** What are the problems for management in creating budgets that affect groups of employees (section 14.2.4)?
- **A14.6** What is budget slack? What are the problems of having (a) too much and (b) too little budget slack (section 14.2.5)?
- **A14.7** How may the use of budgets be affected by the 'politics' of an organisation (section 14.2.6)?
- **A14.8** What is meant by a flexible budget (section 14.3)?
- A14.9 How are (a) variable costs and (b) fixed costs treated in a flexible budget (section 14.3)?
- **A14.10** What is a variance (section 14.3)?
- A14.11 How are adverse and favourable variances calculated (section 14.3)?
- **A14.12** What is a line item budget (section 14.4.1)?
- **A14.13** What is an incremental budget (section 14.4.2)?
- A14.14 What is zero-based budgeting (section 14.4.3)?
- A14.15 What is an output-based budget (programme budget) (section 14.4.4)?

- A14.16 What are the arguments against periodic preparation of budgets (section 14.5)?
- **A14.17** What have researchers found in surveying opinions on the usefulness of budgeting (section 14.6.1)?
- A14.18 What have researchers found about the reasons for budget preparation (section 14.6.2)?
- A14.19 What have researchers found about the support for traditional budgets (section 14.6.3)?
- **A14.20** What have researchers found about the links between budgets and job satisfaction (section 14.6.4)?

B Application

B14.1 [S]

When the financial controller of Bakers Company set the budget for the year ahead, it was expected that monthly output of cake packages would be 12,000 units. In March the output was increased to 14,000 per month following negotiation with a chain of corner shops. The following table reports the original budget and the actual outcome for the month of March.

	Original budget	Actual for March
Cake packages output	12,000	14,000
	£	£
Direct materials	48,000	53,000
Direct labour	24,000	29,000
Variable overhead	6,000	7,200
Fixed overhead	4,000	4,500
Total production costs	82,000	93,700

Required

- (1) Prepare a statement showing a flexible budget and variances.
- (2) Make a recommendation on the most significant variance for investigation, and suggest two possible causes to investigate.

B14.2

The financial controller of the local town council set a budget for street cleaning in one estate as shown in the first column below. In the month of April the cleaning supervisor cut back on 20 miles of cleaning to save costs. The actual costs for April are shown in the second column below.

Original budget	Actual for April
400	380
£	£
1,600	1,550
6,000	5,800
1,500	1,550
_1,000	_1,000
10,100	9,900
	400 £ 1,600 6,000 1,500 1,000

Required

- (1) Prepare a statement showing a flexible budget and variances.
- (2) Write a short comment to the financial controller on the effectiveness of the cleaning supervisor's attempt to reduce costs.

B14.3

Write a short essay (250–300 words) on the following subject: 'What are the arguments for and against using budgets for planning and control?'

B14.4

Write a short essay (250-300 words) on the following subject: 'Budgeting is a technical accounting exercise with no behavioural aspects.'

B14.5 [S] [CIMA question]

What is the name given to a budget that has been prepared by re-evaluating activities and comparing the incremental costs of those activities with their incremental benefits?

- A Incremental budget
- **B** Rolling budget
- C Zero-base budget
- **D** Flexible budget

CIMA Paper P1 - Management Accounting - Performance Evaluation November 2008, Question 1.1

Problem solving and evaluation

C14.1

Seats Ltd ('Seats') manufactures seats for installation in buses. It obtains its raw materials from Comfort Ltd ('Comfort'), a wholly owned subsidiary which sells only to Seats. The raw materials of foam and covering are cut to shape by Comfort and sold to Seats in packages ready for assembly. Seats could obtain raw materials from suppliers other than Comfort but would pay a price 10% higher than that charged by Comfort.

One-third of the output of Seats is bought by Buses Ltd ('Buses'), a company which produces buses. Buses has at present significant unutilised production capacity and could produce and sell more buses if the price of buses could be reduced. To achieve this, Buses would require Seats to reduce its selling prices and has asked Seats to quote a lower price.

Buses has indicated its willingness to increase its total purchases from Seats to one of the following options:

	If the price charged by Seats is:	Then Buses will buy a total of:
Option I	£24 per seat	35,000 seats
Option II	£23 per seat	45,000 seats
Option III	£22 per seat	60,000 seats

The total volume includes in each case the number of seats currently being purchased by Buses from Seats.

The directors of Seats are prepared to offer a lower price to Buses subject to the following restrictions:

- 1 Other existing customers must be guaranteed to receive their present level of supplies at present-day prices.
- 2 There can be no expansion of the productive capacity of either Seats or Comfort.

Sales and production volumes are always equal.

The following budgets for the year to 30 June Year 9 were prepared before Buses made the request for a price reduction:

	Comfort	Seats
Sales in units	50,000	75,000
Unutilised productive capacity	20%	25%
	£	£
Unit selling price	8.00	25.00
Unit cost of production		
Materials	2.00	8.00
Labour	1.50	7.00
Variable overhead	1.00	5.00
Fixed overhead per annum	60,000	110,000

Required

Write a report to the directors of Seats Ltd:

- (a) advising on the effect of each of the options proposed by Buses; and
- (b) containing a statement comparing the original budgeted profits of Comfort and Seats with the profits which would arise if Seats group were to adopt the most advantageous option.

C14.2

You have been appointed financial controller of Constructabus plc, a coach building company, which specialises in two types of bus, a standard double-deck vehicle and a luxury coach model. The chassis and engine are bought in and the framework of each bus is built on the assembly floor. All the fixtures and fittings are added in the finishing shed to meet customers' specifications.

The head of the accounts department has provided you with the following information for the year ended 31 August Year 8:

	Standard bus	Luxury coach
Sales in units	100	120
Total sales value	£3,075,000	£4,020,000
Production in units	90	80
Stock of finished units at 31 August Year 8	20	30
Labour hours per unit:		
Assembly floor	2,000	1,000
Finishing shed	1,000	1,500
Direct materials cost per unit	£4,000	£4,000
Total variable selling costs	£150,000	£144,000
Departmental Costs:	Assembly floor	Finishing shed
	£	£
Labour	1,300,000	1,260,000
Variable overhead	520,000	210,000
Fixed overhead	200,000	180,000

Further information:

- 1 Stocks are valued at variable cost of production for management accounting purposes. Work-in-progress may be ignored. At 1 September Year 7, stock values were £25,000 per standard bus and £21,500 per luxury coach.
- 2 The assembly floor has achieved full working capacity during the year but the finishing shed was 25% under-utilised.

The head of the accounts department has prepared the following budget for the year ending 31 August Year 9:

	Standard Bus	Luxury coach
Sales in units	60	150
Total sales value	£1,845,000	£5,475,000
Production in units	60	145
Direct materials costs	£240,000	£725,000
Total variable selling costs	£105,000	£180,000
Departmental Costs:	Assembly floor	Finishing shed
	£	£
Labour	1,590,000	1,665,000
Variable overhead	795,000	277,500
Fixed overhead	200,000	220,000

Further information:

- 1 Labour hours per unit are assumed to be the same as for the year ended 31 August Year 8.
- 2 Due to changing patterns in public transport, the budget has recognised that demand for standard buses has fallen by 40% but that sales of the luxury coaches will expand by 25%.

Required:

Prepare a report for the board which provides:

- (a) a statement of budgeted profit for each product for the year ending 31 August Year 9;
- (b) a comparison of this budget with the actual results for each product for the year ended 31 August Year 8; and
- (c) comments on your analysis.

Case studies

Real world cases

Prepare short answers to Case studies 14.1, 14.2 and 14.3.

Case study 14.4

You have been approached by James Johnstone for advice on budgeting techniques. Mr Johnstone has recently inherited a majority shareholding in, and been appointed managing director of, Nicholas Knitwear Ltd ('NK'). NK is a small, long-established family firm which manufactures knitwear for sale to several department stores. It also owns and operates three retail outlets in tourist areas which sell NK products and other gift items.

NK is profitable, but Mr Johnstone is concerned that no one seems to know exactly how profitable it could be or should be. The quarterly management accounts report this year's actual figures compared with last year's actual figures, with no comment on the differences. Mr Johnstone realises that NK should have budgets against which annual performance can be measured, but has no idea as to how to proceed.

Write a report to Mr Johnstone advising him on appropriate budgeting techniques for NK.

Note

1. Bunce, P. 'The "beyond budgeting" journey towards adaptive management', in CIMA/ICAEW (2004). See also the BBRT website: www.bbrt.org.