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Budgeting, the Flexed Budget Approach – A Case Study

Those senior Book-keepers considering taking the ICB's Level IV tests of competence will have in their vocabulary an array of terminology that is commonly seen in reports to management. Budgets and Budgetary Control is no exception and before we examine a business activity in the Case Study I wish to define a number of terms associated with the Budgetary Technique.

These definitions in " " are taken from CIMA's official terminology.

Budget

"A plan expressed in money. It is prepared and approved prior to the budget period and may show income, expenditure, and the capital to be employed. May be drawn up showing incremental effects on former budgeted or actual figures, or be compiled by Zero-Base Budgeting." Zero-Base Budgeting involves the re-evaluation of all activities each time the budget is set.

Budgetary Control

"The establishment of budgets relating to the responsibilities of executives to the requirements of a policy, and the continuous comparison of actual with budgeted results, either to secure by individual action the objectives of that policy or to provide a basis for revision."

You will note later that the continuous comparison of actual with budgeted results will be in the form of a variance analysis report – see Case Study.

Flexible Budget

"A budget which, by recognising different cost behaviour patterns, is designed to change as volume of output changes."

In formulating a budget and one based upon flexible budgetary methodology further consideration needs to be given to terminology and thus cost behaviour.

Variable Cost

One which will increase or decrease in line with the volume of output.

Fixed Cost

One which, in the short run, will remain constant irrespective of the volume of output.

In some business activity we also often encounter costs that do not always match the definitions above; and thus semi-variable costs are experienced.

Semi-Variable Cost

"A cost containing both fixed and variable components and which is thus affected by fluctuations in the level of activity."

Case Study

Crescent Cues are to introduce a further product and has produced the following plans for period ended March 2012. It has conducted a full analysis of its cost structure and cost behaviour patterns.

Budget Jan-March 2012

Output	**6000**	**6500**
Sales Revenue	450000	487500
Direct Labour	189000	204750
Direct Material	126000	136500
Variable Costs	30000	32500
Semi-Variable Costs	24000	25500
Fixed Cost	25000	25000
	394000	424250
Profit / (Loss)	£56000	£63250

At the end of March the actual results showed:

Actual Jan-March 2012

Output	6800
Sales Revenue	510000
Direct Labour	217600
Direct Material	139600
Variable Costs	34680
Semi-Variable Costs	27100
Fixed Costs	25500
	444480
Profit / (Loss)	£65520

To report these results fully to management and thus identify the variances for management control purposes we need to formulate the budget allowance for an output of 6800 units, so that a meaningful comparison of budget to actual results can be prepared.

In formulating the flexed budget for 6800 units we need to examine each element of cost to identify the effect of changing volumes and also the effect on income of these changes.

Sales Revenue

The budget showed a unit revenue or selling price of £75 ie: £450000 / 6000 = £75.

Therefore the allowance for 6800 in the flexed budget would be 6800 units @ £75 = £510000.

Direct Labour

At the two budgeted levels of output the labour cost per unit is £189000 / 6000 = £31.50 and £204750 / 6500 = £31.50.

Therefore the budget allowance for 6800 units would be 6800 @ £31.50 = £214200.

Direct Material

At the two budgeted levels of output the material cost per unit is £126000 / 6000 = £21; and £136500 / 6500 = £21.

Therefore the budget allowance for 6800 units would be 6800 @ £21 = £142800.

Variable Costs

At the two budgeted levels of output the variable costs per unit is £30000 / 6000 = £5 and £32500 / 6500 = £5.

Therefore the budget allowance for 6800 units would be 6800 @ £5 = £34000.

Semi-Variable Costs

Here we need to identify the fixed and variable elements in this cost. This is facilitated by the use of the Hi-Low method.

Firstly we need to examine the range of output and the range of cost.

Output	6000	6500	Range: 500
Cost	£24000	£25500	£1500

Therefore the variable element of the cost will be £1500 / 500 = £3 per unit.

To determine the fixed element at 6000 units:

6000 x £3 per unit variable	=	£18000
Total cost at this level		£24000
Fixed element		£6000

Thus at 6500 units

(6500 x £3) + £6000	=	£25500

Therefore the budget allowance for 6800 units would be:

Variable Element 6800 @ £3	=	£20400
Fixed Element		£6000
Budget allowance		£26400

Fixed Costs

These are £25000 at each level in the preliminary budget.

Therefore the budget allowance for 6800 units would be at the same level £25000 as the cost is fixed.

We can now using these figures prepare the flexible budget at 6800 units and compare it to the actual results and so determine the variances.

Performance Report Quarter Ended 31 March 2012

	Flexed Budget	**Actual**	**Variance F / (A)**
Output	6800	6800	
	£	**£**	**£**
Sales Revenue	510000	510000	-
Direct Labour	214200	217600	(3400)
Direct Material	142800	139600	3200
Variable Costs	34000	34680	(680)
Semi-Variable Costs	26400	27100	(700)
Fixed Costs	25000	25500	(500)
	442400	444480	
Profit / (Loss)	£67600	£65520	(2080)

The preliminary budgets were based on production volumes of 6000 and 6500 units.

However the actual performance for the period was 6800 units.

The performance report is a ‘like with like’ comparison, the budget cost and revenue allowance for 6800 units compared with the actual costs and revenue for that level of activity.

The profit variance is adverse by £2080, in that the flexed budget, shows an anticipated profit of £67600 whereas the actual was £2080 less than budget.

The variances on both variable and semi-variable costs are relatively small and worthy of little comment as is the case of the fixed cost variance.

The adverse labour variance £3400, indicates that the labour had been less efficient than expected in the period, assuming that there had been no increase in the rate of pay and this needs attention of management. The material variance shows a favourable position of £3200 and may be due to either a more favourable usage of material or a more favourable price of material than planned.