



# Chapter 15

## Investigating and Correcting Variances

## How do variances from budget arise and how can I correct them?

Variances occur because predictions are not perfect. Unforeseen events or random fluctuations mean that actual performance differs from budgeted figures. The first step in understanding why these variances arise is to categorise them as one of three types. A rate variance occurs where there has been a change in the amount charged for an item. For example, an adverse sales price variance arises when business' products are sold for less than planned. An outlay variance occurs where there has been a change in the number of units purchased. For example, a favourable labour usage variance arises when fewer workers are employed than budgeted for. And a timing variance occurs where an item is purchased in a different month to the one indicated in the budget. For example, a business might record an adverse materials variance in March, because it bought a new machine a month early. The opposite will happen in April, when it will benefit from a favourable materials variance of the same amount, because it does not need to buy the machine again.

### Variances

Unforeseen events or random fluctuations mean that actual performance differs from budgeted figures.

A rate variance occurs where the price or cost is different to budget, eg. a sales price variance.

An outlay variance occurs where the quantity bought or sold is different to budget, eg. a labour usage variance.

A timing variance occurs where an item is purchased at a different time than planned. The opposite timing variance will reverse the original variance.

For example, each of the variances calculated for department X's budgeted profit and loss account can be broken down to see how much of it is due to a rate variance, how much is due to an outlay variance, and how much is due to a

timing variance. The favourable sales variance of £10,000 may be due to heavy discounting, resulting in an adverse sales price variance of £5,000, but many more sales, leading to a favourable sales volume variance of £15,000. This would suggest that the favourable sales variance is a result of a deliberate change in strategy by management, who therefore already understand its causes and have nothing new to learn from further analysis. In light of this, the £2,000 adverse materials variance for electrical components should also not be a concern. It is completely explained by an adverse materials usage variance, due to the increased production needed for January's discounted sales campaign.

Department X - Budgeted Profit and Loss Account						
	Jan	Actual	Variance	Rate	Outlay	Timing
<b>Mobile phones</b>						
Sales	30 000	40 000	10 000 F	(5 000) A	15 000 F	0
<b>Direct costs</b>						
Electrical components	(5 000)	(7 000)	(2 000) A	0	(2 000) A	0
Plastics	(1 000)	(2 000)	(1 000) A	0	0	(1 000)A
Engineers	(8 000)	(12 000)	(4 000) A	(3 000) A	(1 000) A	
<b>Cost of goods sold</b>	(14 000)					
<b>Gross profits</b>	16 000					
<b>Headphones</b>						
Sales	8 000					
<b>Direct costs</b>						
Electrical components	(1,500)					
Plastics	(500)					
Engineers	(2 000)					
<b>Cost of goods sold</b>	(4 000)					
<b>Gross profits</b>	4 000					

Department X - Budgeted Profit and Loss Account						
	Jan	Actual	Variance	Rate	Outlay	Timing
<b>Department X</b>						
<b>Overheads</b>						
Marketing	(8 000)					
Legal	(6 000)					
Depreciation	(2 000)					
<b>Total overheads</b>	(15 000)					
Gross profits	6 000					
PBIT						
Interest	(1 000)					
Taxation	(2 000)					
<b>Net profit after tax</b>	<b>2 000</b>					

The £1,000 adverse materials variance for plastics may be entirely explained by a timing variance, because these materials were used for production in January rather than February. This should not be a concern for managers, because the corresponding timing variance for February will make plastics costs £1,000 lower than they would have been, because some of February's stock has already been produced. However, 75% of the £4,000 adverse labour variance for engineers was due to an adverse labour rate variance. Engineers were paid a higher hourly rate than budgeted for, and further investigation is needed to uncover the specific reasons for this. Was it simply to be expected from overtime payments from January's last-minute sales campaign? Or was there a shortage of available engineers so higher rates had to be paid? In which case, what recruitment strategies is the HR department implementing to ensure this shortage does not recur in the future?

**Timing Variances  
Will Be Reversed**

**Significant  
Variances Require  
Thorough  
Investigation**

Variances arise in even the most well thought-out budgets, because budgeted figures can only ever be based on estimates and forecasts. Accepting this discrepancy between predictions and actual events, means that very small budget variances should not cause concern, but rather, should be expected and accepted. Such variances can be planned for, by setting aside some revenue in a contingency account. Larger variances, however, should be investigated so that corrective action can be taken to eliminate them in the future.

*A significant cause is inaccurate budgeting, and this is preventable. Excessive optimism or a lack of data, leads to unrealistic expectations and frequent inaccuracies.*

Remember too, that favourable variances should not be blindly accepted as good, because although they may indicate that money was saved on production, this may be because production targets were missed, so fewer sales could be made. Where favourable variances strictly benefit an organisation, they should also be investigated so that lessons can be learnt to improve future performance.

