

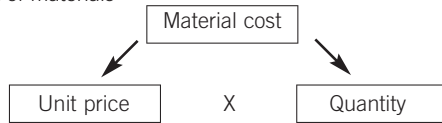
COUNT THE COST

In the final part of her three-part series, Mary Ofili looks at standard costing and direct materials variance

STANDARD DIRECT MATERIALS

The standard cost of direct materials is made up of:

- The quantity of materials expected to be used; and
- The unit cost of materials



DIRECT MATERIALS VARIANCE

This is the difference between the standard total cost of materials for the actual level of production and the actual costs of materials incurred in the production.

This is simply measuring the difference between what the materials should have cost for the actual level of production and what it actually cost.

Notice that we use, the standard cost of materials for the actual level of production, this is in line with comparing 'like with like' and flexing budgets, so that we check the budgeted amount to be spent at a level of production against the actual amount we spent at that level of production.

	£
Standard total material cost	X
Actual total material cost	<u>X</u>
Total material cost variance	<u>X</u>

If the actual cost is less than the standard cost, then the variance will be favourable and if the actual cost is more than the standard cost, then the variance will be adverse. This will mean that;

ACTUAL COST > STANDARD COST = ADVERSE variance
 ACTUAL COST < STANDARD COST = FAVOURABLE variance

The total direct materials variance can be split into the following two variances:

- Direct materials price variance
- Direct materials usage variance

Where there is a favourable direct material variance, it indicates to management that there was some efficiency either in the unit price or in the quantity of materials used for the production or both; and where there is an adverse variance it indicates that there was some inefficiency either in the unit price or in the quantity of materials used or both; which has contributed to the total material variance.

An example is as below:

If the standard cost of materials for a product called 'Product F' is as below:

1 unit of Product F	Quantity	Cost per yard (£)	Total cost per unit (£)
Materials	3.2yards	16.00	51.20

4,200 yards of materials which cost a total of £76,860 was used for the production of 1,300 units during the month. What will be the direct materials variance?

SOLUTION



Total materials variance at 1,300 units of production:

Standard total material cost (3.2 yards x 1,300 units x £16)	£66,560
Actual total material cost	<u>£76,860</u>
Total materials cost variance	<u>£10,300</u> Adverse**

This means that in making 1,300 units of Product F, the materials should have cost £66,560, but it cost us £76,860, thereby resulting in an overspend of £10,300, which is adverse to the business.

NOTE THE FOLLOWING AS WELL:

Materials price variance:

Standard cost of actual quantity used (4,200 yards x £16)	£67,200
Actual cost of actual quantity used	<u>£76,860</u>
Materials price variance	<u>£9,660</u> Adverse

Materials usage variance:

Standard quantity required for actual production at standard price (3.2 yards x 1,300 units x £16)	£66,560
Actual quantity used for actual production at standard price (4,200 yards x £16)	<u>£67,200</u>
Materials usage variance	<u>£640</u> Adverse

CHECK THE OVERALL POSITION

The accuracy of the computations can now be checked by ensuring that the sum of the materials price variance and the materials usage variance add up to be the same as the total materials cost variance.

Materials price variance	£9,660 Adverse
Materials usage variance	<u>£640</u> Adverse
Total materials cost variance	<u>£10,300</u> Adverse**

This means that the adverse direct materials variance of £10,300 is as a result of some level of inefficiency in the unit price of the materials bought and the quantity of the materials used during the production process. So the actual unit price was higher than budgeted and the quantity of materials used to produce 1,300 units was more than budgeted as well. **PQ**

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