Accounting Notes
Flexible Budgets, Budget Variances

Static vs Flexible Budgets

Static Budget - the budget is prepared for only one level of production volume. Also called a Master budget.

Flexible Budget - a summarized budget that can easily be computed for several different production volume levels. Separates variable costs from fixed costs.

Flexible Budget format

<table>
<thead>
<tr>
<th>Flexible Budget per Output Unit</th>
<th>Output Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># units</td>
</tr>
<tr>
<td>Sales Revenue</td>
<td></td>
</tr>
<tr>
<td>Unit sales price (SP)</td>
<td>SP * units</td>
</tr>
<tr>
<td>Variable Expenses</td>
<td></td>
</tr>
<tr>
<td>Unit Variable cost (VC)</td>
<td>VC * units</td>
</tr>
<tr>
<td>Fixed Expenses</td>
<td>Fixed Cost</td>
</tr>
<tr>
<td>Total Expenses</td>
<td>VC + FC</td>
</tr>
<tr>
<td>Operating Income</td>
<td>Sales - Exp</td>
</tr>
</tbody>
</table>

Flexible Budget & Vertical Analysis

Budget Variances:

<table>
<thead>
<tr>
<th>Static Budget Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual Results</td>
</tr>
<tr>
<td>Flexible Budget (Actual Units)</td>
</tr>
<tr>
<td>Static Budget (Expected Units)</td>
</tr>
</tbody>
</table>

Flexible Budget Variance  Sales Volume Variance

If the variances are positive, then it is considered to be unfavorable and is recorded as a debit. If the variances are negative, then it is considered to be favorable and is recorded as a credit.
Income Statement Performance Report

<table>
<thead>
<tr>
<th></th>
<th>Actual Results at Actual prices (A)</th>
<th>Flexible Budget Variance (B)</th>
<th>Flexible Budget for Actual Units (C)</th>
<th>Sales Volume Variance (D)</th>
<th>Static Budget (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Output Units</strong></td>
<td># actual units</td>
<td>- 0 -</td>
<td># actual units difference (E) - (C)</td>
<td># standard units</td>
<td></td>
</tr>
<tr>
<td><strong>Sales Revenue</strong></td>
<td>units * Sales price</td>
<td>- 0 -</td>
<td>units * Sales price difference (E) - (C)</td>
<td>units * Sales price</td>
<td></td>
</tr>
<tr>
<td><strong>Various Expenses</strong></td>
<td>units * actual VC/unit difference</td>
<td>(C) - (A)</td>
<td>units * Standard VC/unit difference (E) - (C)</td>
<td>units * Standard VC/unit</td>
<td></td>
</tr>
<tr>
<td><strong>Fixed Expenses</strong></td>
<td>Actual FC difference (C) - (A)</td>
<td>Standard FC - 0 -</td>
<td>Standard FC</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>Total Expenses difference (C) - (A)</td>
<td>Total Expenses difference (E) - (C)</td>
<td>Total Expenses (E) - (C)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operating Income</strong></td>
<td>Sales - Expenses difference (C) - (A)</td>
<td>Sales - Expenses difference (E) - (C)</td>
<td>Sales - Expenses (E) - (C)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Price and Efficiency Variances:

**Standard Cost (price)** - a predetermined cost that usually is expressed on a per unit basis

**Flexible budget variance** = **Price Variance** + **Efficiency Variance**

**Price Variance** - measures how well the business keeps unit prices of material and labor within established standards

\[
\text{Price Variance} = \left( \frac{\text{Actual Price/unit}}{\text{Standard Price/unit}} \right) \times \text{Quantity}
\]

**Efficiency (Quantity) Variance** - measures whether the quantity of materials or labor used to make the actual number of units is within the standard quantity allowed for that level of production.

\[
\text{Efficiency (Quantity) Variance} = \left( \frac{\text{Actual Quantity}}{\text{Standard Quantity}} - 1 \right) \times \text{Price/unit}
\]
Manufacturing Overhead (MOH) Variances:

MOH allocated to production = predetermined MOH rate * base allowed for actual units produced

Overhead Flexible Budget Variance = Actual Overhead costs * Flexible budget overhead for actual units

Production Volume Variance = Flexible budget overhead for actual units * Standard overhead allocated to production

Total MOH Variance = Overhead Flexible Budget Variance + Production Volume Variance

Journal Entries when variances are recognized as they occur:


Purchase of Materials:

Materials Inventory AQ * SP

DMPV Difference

Accounts Payable AQ * AP

Use of Materials in production:

Work in Process Inventory SQ * SP

DMEV Difference

Materials Inventory AQ * SP

Journal Entries (continued):

Labor costs incurred:

Manufacturing Wages AQ * SP
Assigning Labor costs to production:

Work in Process Inventory \( SQ \times SP \)

DLEV \( SQ \times SR \)

Manufacturing Wages \( AQ \times SP \)

Actual Overhead incurred:

Manufacturing Overhead Total costs
Accounts Payable $ 
Accumulated Depreciation $

List all individual costs
Prepaid Insurance $

Allocating Overhead

Work in Process Inventory \( SQ \times SR \)
Manufacturing Overhead \( SQ \times SR \)

Completed units

Finished Goods Inventory Total costs
Work in Process Inventory Total costs

Cost of units sold

Cost of Goods Sold Total costs
Finished Goods Total costs

Record Overhead variances and close Manufacturing Overhead account

Manufacturing Overhead
OH Flexible budget variance
Production Volume variance

Standard Cost Income Statement:

Sales Revenue $
Cost of Goods Sold at standard cost $
Manufacturing variances:

- Direct Materials Price Variance $
- Direct Materials Efficiency Variance $
- Direct Labor Price Variance $
- Direct Labor Efficiency Variance $
- Overhead Flexible Budget Variance $
- Production Volume Variance $_______

  Total Manufacturing Variances $_______

Cost of Goods Sold at actual cost $_______

Gross Margin $_______

Operating Expenses $_______

Operating Income $_______