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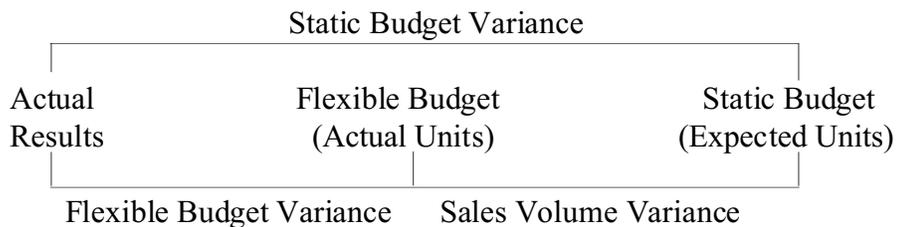
Flexible Budget - a summarized budget that can easily be computed for several different production volume levels. Separates variable costs from fixed costs.

Flexible Budget format

	Flexible Budget per Output Unit	Output Levels		
		# units	# units	# units
Sales Revenue	Unit sales price (SP)	SP * units	SP * units	SP * units
Variable Expenses	Unit Variable cost (VC)	VC * units	VC * units	VC * units
Fixed Expenses		Fixed Cost	Fixed Cost	Fixed Cost
Total Expenses		VC + FC	VC + FC	VC + FC
Operating Income		Sales - Exp	Sales - Exp	Sales - Exp

Flexible Budget & Vertical Analysis

Budget Variances:

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                          Static Budget Variance
         ┌──────────────────────────────────────────────────────┐
   Actual              Flexible Budget                Static Budget
   Results              (Actual Units)               (Expected Units)
         └──────────────────────┴───────────────────────────────┘
       Flexible Budget Variance      Sales Volume Variance
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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

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

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

$$\text{Price Variance (DM or DL)} = \left(\text{Actual Price/unit} - \text{Standard Price/unit} \right) * \text{Actual Quantity}$$

Efficiency 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.

$$\text{Efficiency (Quantity) Variance (DM or DL)} = \left(\text{Actual Quantity} - \text{Standard Quantity} \right) * \text{Standard Price/unit}$$

Manufacturing Overhead (MOH) Variances:

MOH allocated   Standard   Standard quantity of allocation
to production   =   predetermined MOH rate   *   base allowed for actual units produced

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

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

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

Journal Entries when variances are recognized as they occur:

     Note: AQ = Actual Quantity   SQ = Standard Quantity
            AP = Actual Price   SP = Standard Price
            SR = Standard Predetermined Overhead Rate
            DMPV = Direct Materials Price Variance
            DMEV = Direct Material Efficiency Variance
            DLPV = Direct Labor Price Variance
            DLEV = Direct Labor Efficiency Variance

     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

DLPV	Difference	
Wages Payable		AQ * AP

Assigning Labor costs to production:

Work in Process Inventory	SQ * SP	
DLEV		Difference
Manufacturing Wages		AQ * 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 * SR	
Manufacturing Overhead		SQ * 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 $_____