

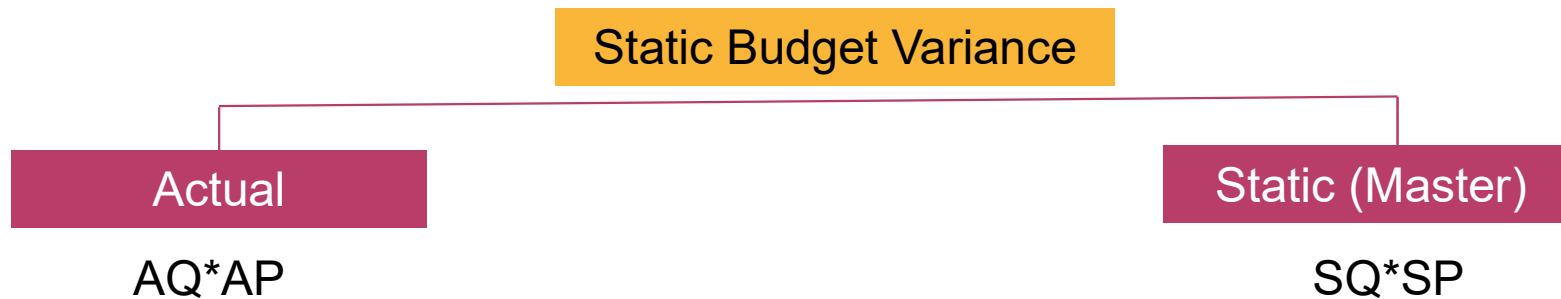
CHAPTER 7

Flexible Budgets,
Direct-Cost Variances,

BASIC CONCEPTS

- ◉ Variance—difference between actual results and expected (budgeted) performance.
- ◉ Management by exception—the practice of focusing attention on areas not operating as expected (budgeted).
- ◉ Static (master) budget is based on the output planned at the start of the budget period.

STATIC BUDGET VARIANCE



Basic Concepts

- Variance—difference between actual results and expected (budgeted) performance.
- Management by exception—the practice of focusing attention on areas not operating as expected (budgeted).
- Static (master) budget is based on the output planned at the start of the budget period.

LEVEL 1 ANALYSIS, ILLUSTRATED

Level 1 Analysis

	Actual Results (1)	Static-Budget Variances (2) = (1) – (3)	Static Budget (3)
Units sold	10,000	2,000 U	12,000
Revenues	\$ 1,250,000	\$190,000 U	\$1,440,000
Variable costs			
Direct materials	621,600	98,400 F	720,000
Direct manufacturing labor	198,000	6,000 U	192,000
Variable manufacturing overhead	130,500	13,500 F	144,000
Total variable costs	950,100	105,900 F	1,056,000
Contribution margin	299,900 ^b	84,100 U	384,000 ^c
Fixed costs	285,000	9,000 U	276,000
Operating income	\$ 14,900	\$ 93,100 U	\$ 108,000
	↑	\$ 93,100 U	↑
	Static-budget variance		

^aF = favorable effect on operating income; U = unfavorable effect on operating income.

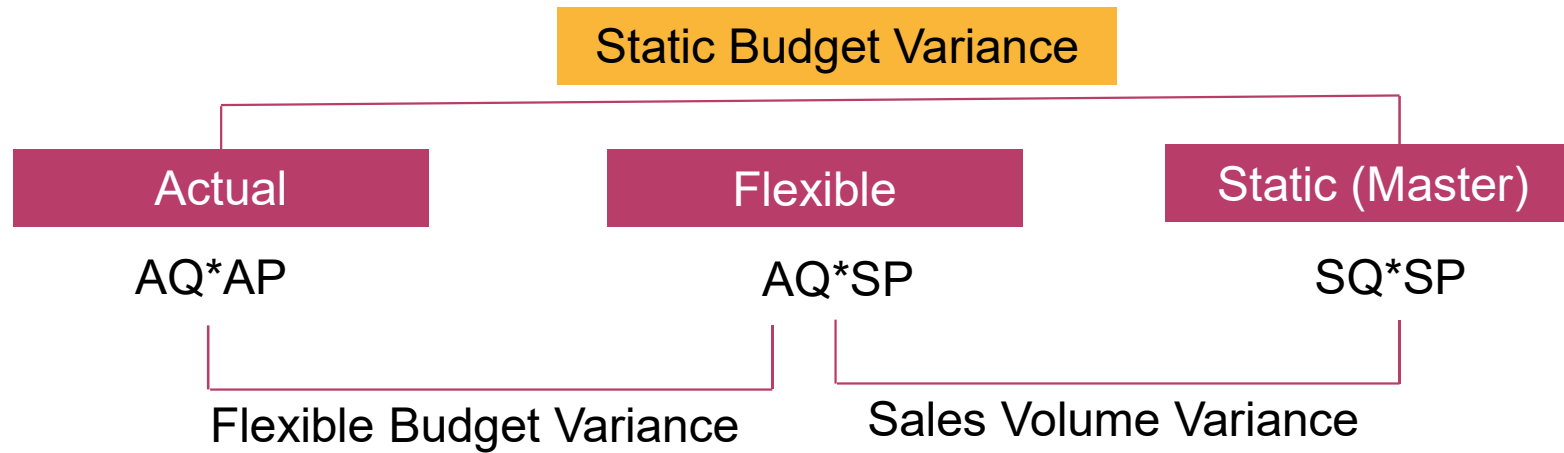
^bContribution margin percentage = $\$299,900 \div \$1,250,000 = 24.0\%$.

^cContribution margin percentage = $\$384,000 \div \$1,440,000 = 26.7\%$.

FLEXIBLE BUDGET

- ◉ Flexible budget—shifts budgeted revenues and costs up and down based on actual operating results (activities)
- ◉ Represents a blending of actual activities and budgeted dollar amounts
- ◉ $AQ * SP$

FLEXIBLE BUDGET



LEVEL 2 ANALYSIS, ILLUSTRATED

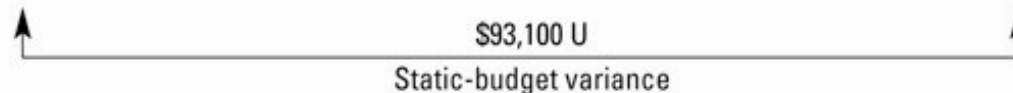
Level 2 Analysis

	Actual Results (1)	Flexible-Budget Variances (2) = (1) – (3)	Flexible Budget (3)	Sales-Volume Variances (4) = (3) – (5)	Static Budget (5)
Units sold	10,000	0	10,000	2,000 U	12,000
Revenues	\$1,250,000	\$50,000 F	\$1,200,000	\$240,000 U	\$1,440,000
Variable costs					
Direct materials	621,600	21,600 U	600,000	120,000 F	720,000
Direct manufacturing labor	198,000	38,000 U	160,000	32,000 F	192,000
Variable manufacturing overhead	130,500	10,500 U	120,000	24,000 F	144,000
Total variable costs	950,100	70,100 U	880,000	176,000 F	1,056,000
Contribution margin	299,900	20,100 U	320,000	64,000 U	384,000
Fixed manufacturing costs	285,000	9,000 U	276,000	0	276,000
Operating income	\$ 14,900	\$29,100 U	\$ 44,000	\$ 64,000 U	\$ 108,000

Level 2



Level 1



^aF = favorable effect on operating income; U = unfavorable effect on operating income.

LEVEL 2 VARIANCES, ANALYSIS

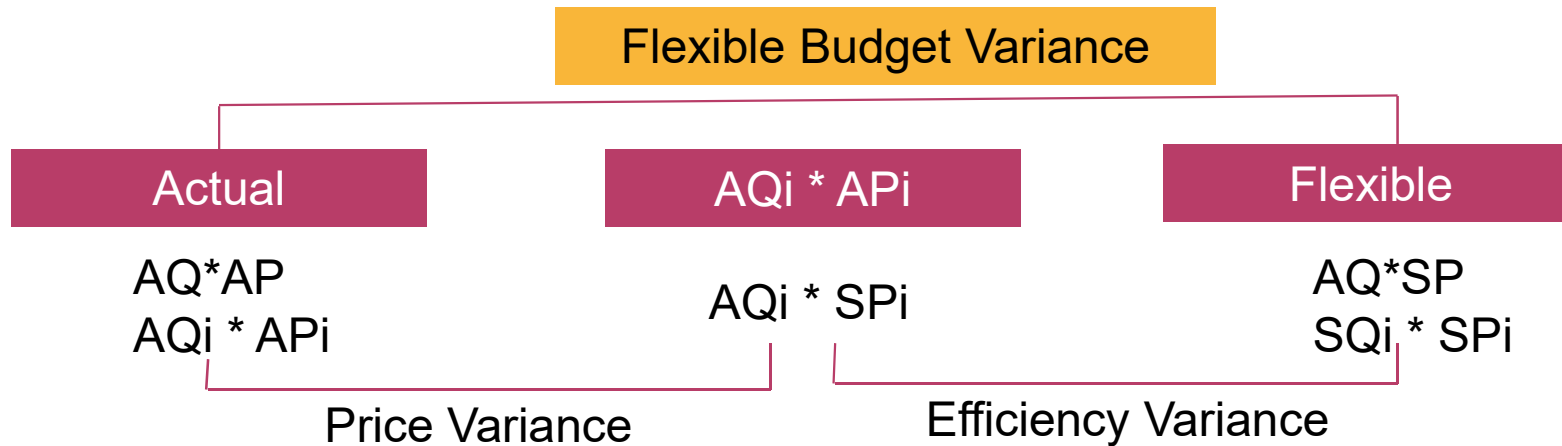
Some possible reasons we might incur an unfavorable Sales-Volume Variance include:

1. Failure to execute the sales plan
2. Weaker than anticipated demand
3. Aggressive competitors taking market share
4. Unanticipated market preference away from the product
5. Quality problems

LEVEL 3 VARIANCES

- ⦿ All product costs can have Level 3 variances. Direct materials and direct labor will be handled next.
- ⦿ Direct materials and direct labor both have price and efficiency variances, and their formulae are the same.

DM AND DL LEVEL 3 VARIANCES



7-10

Example:

Actual units produced 10,000

Actual DM cost per unit \$15 (5 kg*\$3 per Kg)

Standard DM cost per unit \$12 (6 kg * \$2 per Kg)

LEVEL 3 VARIANCES

- Price variance formula:

Price	=	{	Actual Price	-	Budgeted Price	}	X	Actual Quantity
Variance			Of Input		Of Input			Of Input

- Efficiency variance formula:

Efficiency	=	{	Actual Quantity	-	Budgeted Quantity of Input	}	X	Budgeted Price
Variance			Of Input Used		Allowed for Actual Output			Of Input

LEVEL 3 ANALYSIS, ILLUSTRATED

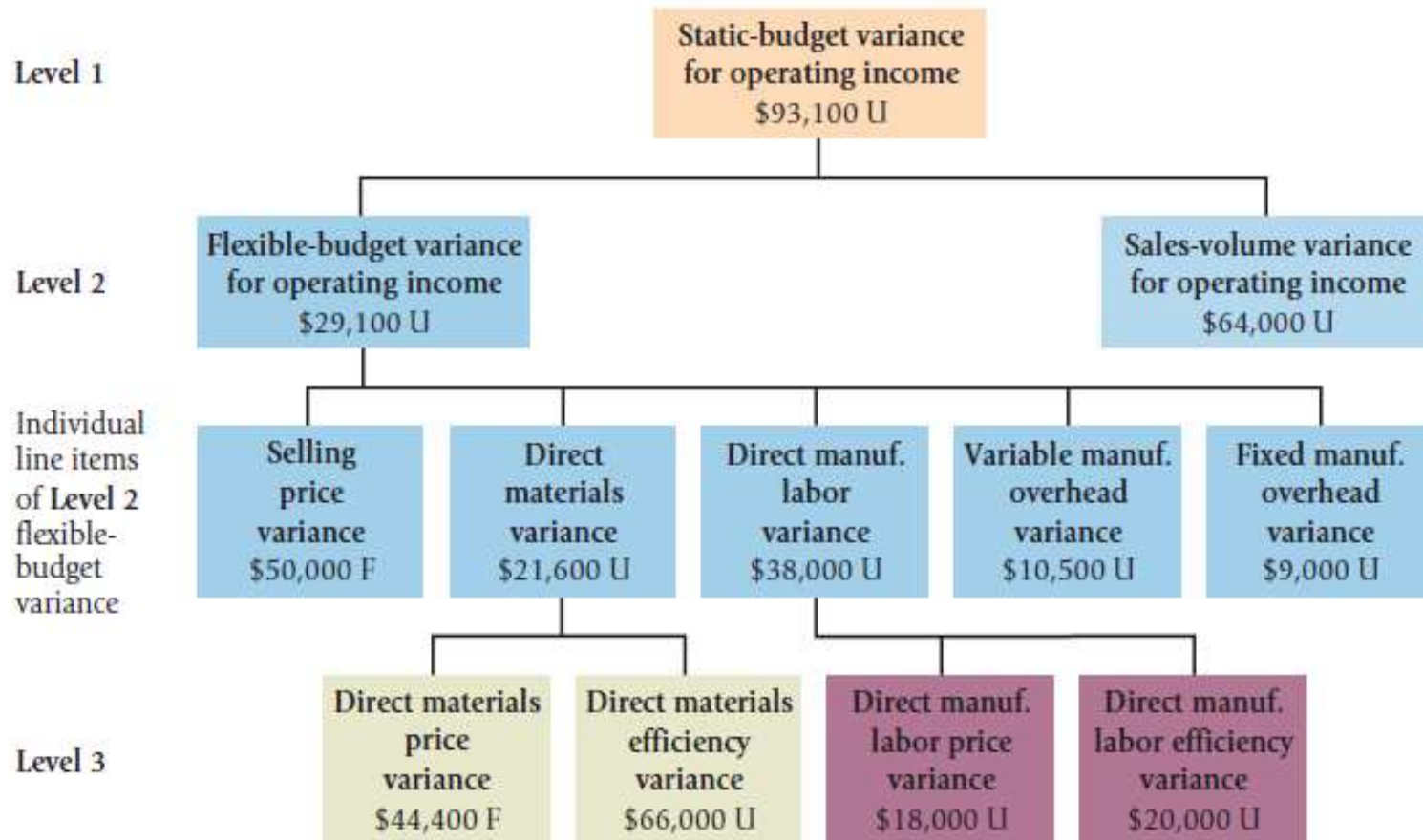
Level 3 Analysis

	Actual Costs Incurred (Actual Input Quantity × Actual Price) (1)	Actual Input Quantity × Budgeted Price (2)	Flexible Budget (Budgeted Input Quantity Allowed for Actual Output × Budgeted Price) (3)
Direct Materials	(22,200 sq. yds. × \$28/sq. yd.) \$621,600	(22,200 sq. yds. × \$30/sq. yd.) \$666,000	(10,000 units × 2 sq. yds./unit × \$30/sq. yd.) \$600,000
Level 3	$\xrightarrow{\text{Price variance } \$44,400 \text{ F}}$		$\xrightarrow{\text{Efficiency variance } \$66,000 \text{ U}}$
Level 2	$\xrightarrow{\text{Flexible-budget variance } \$21,600 \text{ U}}$		
Direct Manufacturing Labor	9,000 hours × \$22/hr. \$198,000	9,000 hours × \$20/hr. \$180,000	10,000 units × 0.8 hr./unit × \$20/hr. \$160,000
Level 3	$\xrightarrow{\text{Price variance } \$18,000 \text{ U}}$		$\xrightarrow{\text{Efficiency variance } \$20,000 \text{ U}}$
Level 2	$\xrightarrow{\text{Flexible-budget variance } \$38,000 \text{ U}}$		

^aF = favorable effect on operating income; U = unfavorable effect on operating income.

Copyright © 2015 Pearson Education

VARIANCE SUMMARY





This work is protected by United States copyright laws and is provided solely for the use of instructors in teaching their courses and assessing student learning. Dissemination or sale of any part of this work (including on the World Wide Web) will destroy the integrity of the work and is not permitted. The work and materials from it should never be made available to students except by instructors using the accompanying text in their classes. All recipients of this work are expected to abide by these restrictions and to honor the intended pedagogical purposes and the needs of other instructors who rely on these materials.