



**Webinar series for UPSC ICoAS preparation
(for newly qualified CMAs)**

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Session II : Cost Control and Cost reduction

Cost Control Techniques – Standard Costing & Variance Analysis, Budgets & Budgetary Control

Agenda

How is ICoAS exam different from CMA exam? – general guidance

Concepts of cost control and cost reduction – objectives, approaches & timeframe

Benefits and Challenges

Tools & techniques for Cost control and Cost reduction

- Budgets & budgetary control
- Standard costing & variance analysis

Q & A

A two hour exam

The candidates are tested using only the OTQs, all questions carrying equal marks (total marks 300)

There's a negative marking - For every wrong answer $1/3^{\text{rd}}$ of the marks available are deducted

Concepts of cost control & cost reduction – both aim at managing & optimizing costs

Cost control

- **Objective:** manage & regulate costs within a predetermined limits i.e. budget, standard, target
- **Approach:** monitoring & regulating the usage of resources to ensure efficient utilisation, process optimisation and adherence to established limits
- **Time frame:** focus on cost discipline as a continuous process

Cost reduction

- **Objective:** to reduce costs without compromising quality
- **Approach:** identifying & eliminating unnecessary or inefficient activities or processes
- **Time frame:** strategic initiatives for sustainable benefits

Benefits of cost control & cost reduction

Cost control

- Prevents overspending
- Financial stability during crisis
- Maintain profitability
- Resource optimisation
- Competitive advantage
- Investor confidence
- Long term sustainability

Cost reduction

- Operational efficiency
- Investment to grow
- Improved financial health
- Cost leadership
- Customer value
- Sustainable growth
- Employee engagement
- Improved cash flows

Tools & Techniques of cost control & cost reduction

Cost control

- Budgeting
- Standard costing
- Benchmarking
- Negotiations
- Costs tracking & reporting

Cost reduction

- Value analysis
- Value engineering
- Process reengineering
- Technology adoption
- Outsourcing
- Waste reduction

Budgeting & budgetary control

Types of budget

- Master & functional budgets
- Flexible budgets
- ZBB
- Incremental budgets
- Rolling budgets
- Activity based budgeting

Budgetary control

- Establishing budgets
- Communicate & approve
- Implementation
- Monitoring & measurement of performance
- Variance analysis
- Investigations
- Corrective actions
- Feed-back & feed-forward controls

Sample MCQs on Budgeting

Which of the following statement(s) is/are true regarding budgetary systems in the performance hierarchy?

- 1) Developing new products in response the changes in technology is a budgeting activity that would fall within operational planning and control.
 - 2) Budgetary systems at strategic planning levels look at the business as a whole and define resource requirements.
- A. (1) only
 - B. (2) only
 - C. Neither (1) nor (2)
 - D. Both (1) and (2)

Sample MCQs on Budgeting

Which of the following statements are true regarding activity-based budgeting (ABB)?

1. The costs determined using activity-based costing (ABC) are used as a basis for preparing budgets.
 2. The aim of ABB is to control the number of units output rather than the costs themselves.
- A.(1) only
 - B.(2) only
 - C.Neither (1) nor (2)
 - D.Both (1) and (2)

Sample MCQs on Budgeting

X Co uses rolling budgeting, updating its budgets on a quarterly basis. After carrying out the last quarter's update to the cash budget, it projected a forecast cash deficit of \$400,000 at the end of the year. Consequently, the planned purchase of new capital equipment has been postponed.

Which of the following types of control is the sales manager's actions an example of?

- A. Feedforward control
- B. Negative feedback control
- C. Positive feedback control
- D. Double loop feedback control

Sample MCQs on Budgeting

A definition of **zero-based budgeting** is set out below, with two blank sections. “Zero-based budgeting: a method of budgeting which requires each cost element _____, as if the activities to which the budget relates _____.”

Which combination of two phrases correctly completes the definition?

Blank 1

- A. to be specifically justified
- B. to be set at zero
- C. to be specifically justified
- D. to be set at zero

Blank 2

- could be out-sourced to an external supplier
- could be out-sourced to an external supplier
- were being undertaken for the first time
- were being undertaken for the first time

Standard costing

Setting standards

- Prices, and costs
- Consumption volumes
- Standard cost cards

Standard costing

- Implementation
- Monitoring & measurement of performance
- Variance analysis
- Investigations
- Corrective actions
- Improve & revise standards

Standard costing: variance analysis

Variations related to

- Sales
- Material costs
- Labour costs
- Overheads (fixed & variable)

Variance analysis

- Comparing actual v/s standards
- Get insights into the causes of deviation
- Take corrective actions to improve efficiency, control costs and enhance overall performance

Total sales variance



Sales price variance

- Did each unit sell for more or less than the budgeted selling price?

Sales volume variance

- Did the organisation sell more or less units than was budgeted?

Calculation

Actual Quantity sold × Actual price	(AQ AP)	}	Price variance
Actual Quantity sold × Standard price	(AQ SP)		
Actual Quantity sold × Standard Margin	(AQ SM)	}	Volume variance
Budget Quantity sold × Standard Margin	(BQ SM)		

Note: 'Margin' = contribution per unit (marginal costing) or profit per unit (absorption costing).

Total materials variance



Materials price variance

- Did each unit of material cost more or less than expected?

Materials usage variance

- Did actual production use more or less units of materials than expected?

Calculation

Actual Quantity Purchased × Actual price	(AQ AP)	}	Price variance
Actual Quantity Purchased × Standard price	(AQ SP)		
Actual Quantity Used × Standard price	(AQ SP)	}	Usage variance
Standard Quantity Used × Standard price (for actual production)	(SQ SP)		

Material mix variance

Material	Actual Quantity, Actual Mix (AQAM)	Actual Quantity Standard Mix (AQSM)	difference @ standard price	Variance
M ₁	X kgs	A kgs	$A - X = x_1/\text{kg}$	Var (F/A)
M ₂	Y kgs	B kgs	$B - Y = x_2/\text{kg}$	Var (F/A)
M ₃	Z kgs	C kgs	$C - Z = x_3/\text{kg}$	Var (F/A)
	Sum (X+Y+Z)	Sum (X+Y+Z)	(Total = 0)	Total mix F/A)

Material yield variance

Material	Actual Quantity, Actual Mix (AQAM)	Standard Quantity Standard Mix (SQSM)	difference @ standard price	Variance
M ₁	A kgs	D kgs	$D - A = x_1/\text{kg}$	Var (F/A)
M ₂	B kgs	E kgs	$E - B = x_2/\text{kg}$	Var (F/A)
M ₃	C kgs	F kgs	$F - C = x_3/\text{kg}$	Var (F/A)
	Sum (X+Y+Z)	Sum (X+Y+Z)	(Total = 0)	Total Yield (F/A)

Total labour variance



Labour rate variance

- Did labour cost more or less per hour than expected?

Labour efficiency variance

- Did production take more or less hours than expected?

Actual hours × Actual labour rate

Actual hours × Standard labour rate

Standard Hours (for actual level of production) × standard labour rate

(AH AR)

(AH SR)

(SH SR)

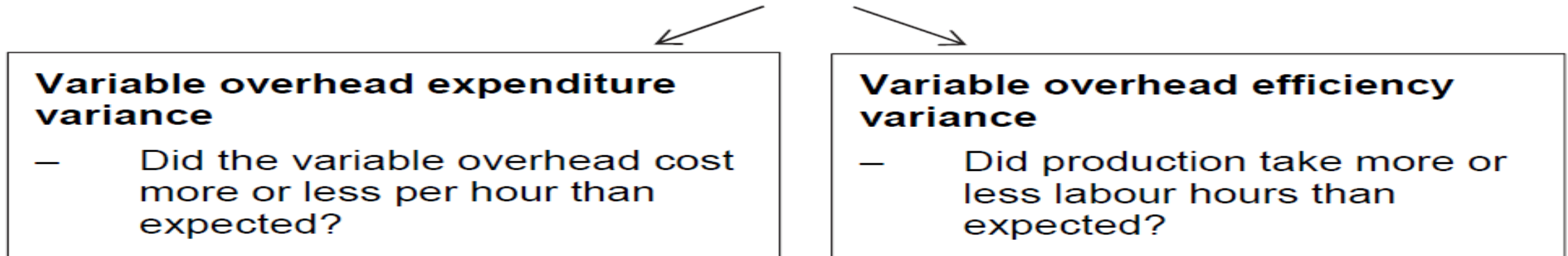


Rate variance

Efficiency variance

Variable overhead variances

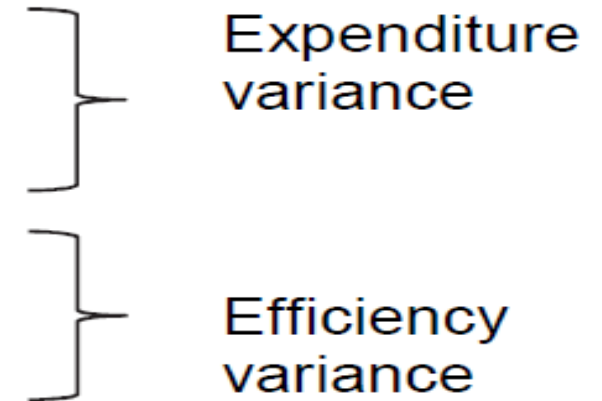
Total variable overheads variance



Actual hours × Actual variable overhead rates (AH AR)

Actual hours × Standard variable overhead rate (AH SR)

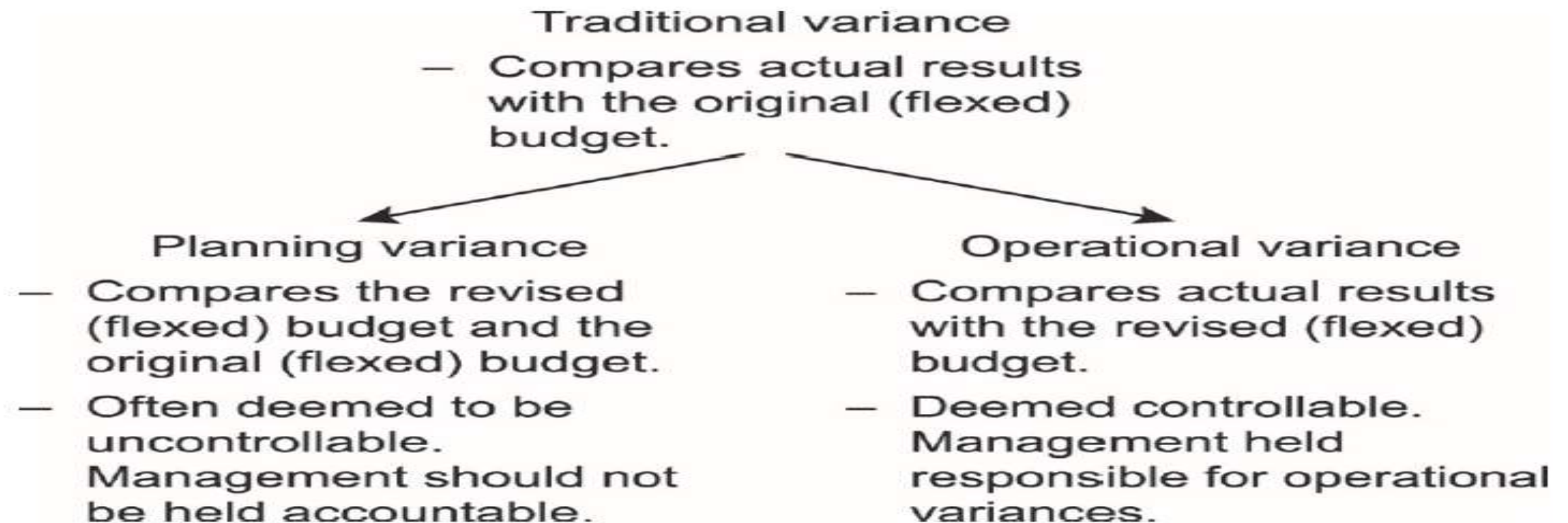
Standard Hours (for actual production) × Standard variable overhead rate (SH SR)



Planning and operational variances

The difference between standard and actual may arise partly due to an unrealistic planning and not solely due to operational factors.

The budget may need to be **revised** to enable actual performance to be compared with a standard that reflects these changed conditions



Planning and operational variances for sales

The sales volume variance can be sub-divided into a planning and operational variance:

Actual sales quantity x standard margin	}	Market share variance (operational)
Revised budgeted sales x standard margin (to achieve target share of actual market)		
Original budgeted sales x standard margin	}	Market size variance (planning)

Sample MCQs on Standard Costing

Which of the following statements is/are true regarding the material mix variance?

(1) A favourable total mix variance would suggest that a higher proportion of a cheaper material is being used instead of a more expensive one.

(2) A favourable total mix variance will usually result in a favourable material yield variance.

- A. (1) only
- B. Both (1) and (2)
- C. (2) only
- D. Neither (1) nor (2)

Sample MCQs on Standard Costing

A company has a higher than expected staff turnover and as a result staff are less experienced than expected.

As an indirect result of this, are the labour rate variance and material usage variance likely to be adverse or favourable?

	Labour rate	Material usage
A	Favourable	Favourable
B	Adverse	Favourable
C	Favourable	Adverse
D	Adverse	Adverse

Sample MCQs on Standard Costing

A company is obliged to buy sub-standard materials at lower than standard price because nothing else is available.

As an indirect result of this purchase, are the materials usage variance and labour efficiency variance likely to be adverse or favourable?

	Material usage	Labour Efficiency
A	Favourable	Favourable
B	Adverse	Favourable
C	Favourable	Adverse
D	Adverse	Adverse

Sample MCQs on Standard Costing

Under absorption costing the sales volume variance is calculated by multiplying the difference in sales volumes by which of the following?

- A. Standard contribution per unit
- B. Standard cost per unit
- C. Standard profit per unit
- D. Standard selling price per unit

The learning pedagogy

- **Understand type of OTQs**
 - Simple knowledge testing: just recall your knowledge, learn foundation, practice a lot
 - Critical thinking questions: apply knowledge, make connections between concepts
- **Read the question carefully**
 - Wording, verbs used, key terms & concepts being tested
- **Elimination process**
 - Identify and eliminate wrong options
 - This narrows your choice
- **Consider all options before answering**
 - Don't rush to select the option that appears correct
- **Identify the qualifiers**
 - Words like 'always', 'never', 'only', 'except'
- **Watch out for negatives**
 - "Which of the following is NOT true?"

