Module 3 quick reference: planning, budgeting and forecasting

SMA EXAM REFERENCE PACK | MODULE 3 | PRINT AND KEEP WITH YOUR NOTES

Exam technique: budgets - work in order from sales to the balance sheet and show every working. Variances - flex the budget to actual output first, label F or U, look for linked pairs, name who explains each, and never treat one variance alone as proof of performance.

Plans, budgets and responsibility

Topic	Remember
Strategic vs operational plan	Strategic: long term (three to five years or more), broad. Operational: usually one year, detailed
Master budget	Operating budget (prepared first) + financial budget (budgeted income statement, balance sheet, cash budget, capital expenditure budget)
Limiting factor	The constraint that caps activity - demand (what can be sold) or capacity and supply (what can be made)
Rolling (continuous) budget	Add a month or quarter as each one ends so the plan always covers twelve months ahead
Jobs of a budget	Plan and allocate scarce resources; coordinate and communicate; motivate and evaluate; learn and warn
Responsibility centres	Cost (costs), revenue (revenue), profit (revenue and costs), investment (profit and assets, e.g. return on investment)
Controllability	Judge a manager only on revenues and costs they control; allocated (indirect) costs are information, not a test
Control loop	Plan; compare actual with budget; investigate material variances; act, learn and update

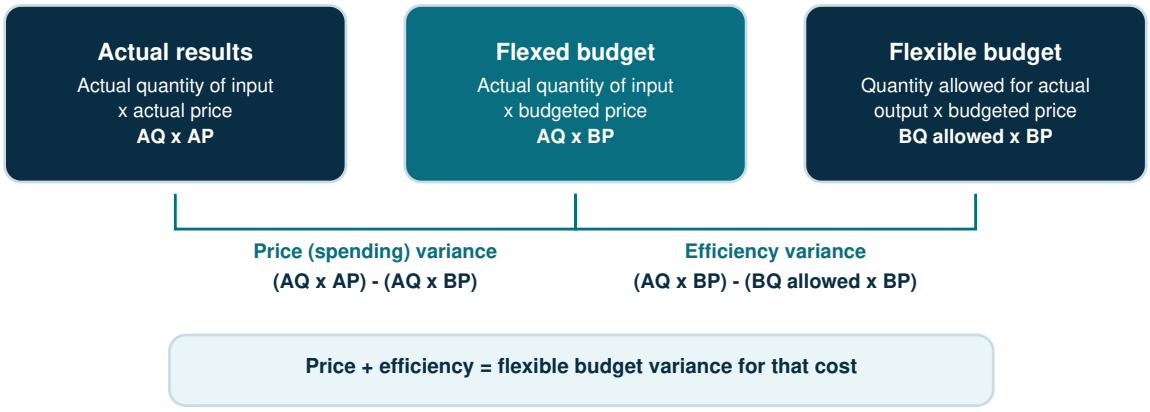
Alternative approaches to budgeting

Approach	Key points
Incremental	Last year plus an adjustment: quick, but ignores change; 'use it or lose it'
Zero-based	Every activity justified from zero. Fresh look; slow, costly; can starve long-term investment
Activity-based	Demand, then activities, then capacity, then the financial budget: feasible plans
Beyond Budgeting	No fixed annual targets; decentralised leadership; adaptive processes; rolling forecasts; relative performance judged with hindsight
Rolling budget vs rolling forecast	A rolling budget extends the budget itself; a rolling forecast predicts key values (budget lines or not) without resetting targets

Budget formulas

Budget	Formula
Sales	Budgeted units sold x budgeted selling price
Production (units)	Budgeted sales + desired closing finished goods - opening finished goods
Direct materials used	Production units x standard quantity per unit (x price for dollars)
Direct materials purchases	Materials used + desired closing materials - opening materials; x price per unit for dollars
Direct labour	Production units x hours per unit x rate per hour
Overhead rate (predetermined)	Budgeted cost pool / budgeted quantity of the cost driver
Manufacturing overhead	Variable rate x budgeted driver quantity + fixed overhead (a lump sum)
Standard cost per unit	Materials + labour + variable overhead + fixed overhead per unit
Cost of goods manufactured	Direct materials used + direct labour + manufacturing overhead (+ opening WIP - closing WIP)
Cost of goods sold	Opening finished goods + cost of goods manufactured - closing finished goods
Budgeted income statement	Sales - cost of goods sold = gross margin; - period (non-manufacturing) costs = operating profit
Cash budget	Opening cash + receipts - payments = closing cash before financing; borrow or invest to hold the minimum balance. Use collection and payment patterns; leave out non-cash items such as depreciation
Flexible budget	Fixed costs + (budgeted variable cost per unit of activity x actual activity)

Three-column framework for cost variances



Variance formulas

Costs: actual above budget = unfavourable (U). Revenue and profit: actual above budget = favourable (F). AQ = actual quantity, AP = actual price, BP = budgeted price, BQ allowed = budgeted quantity allowed for actual output.

Variance	Formula	Usually explained by
Static budget variance	Actual result - static budget	Analyse further: too broad on its own
Flexible budget variance	Actual result - flexible budget (budget at actual output)	Split into price and efficiency
Sales-volume	(Actual units sold - budgeted units sold) x budgeted contribution margin per unit	Profit / investment centre manager, with sales
Selling-price	(Actual price - budgeted price) x actual units sold	Sales (revenue centre) manager
Direct material price	(AQ x AP) - (AQ x BP)	Purchasing manager
Direct material efficiency	(AQ x BP) - (BQ allowed for actual output x BP)	Production manager
Direct labour price (rate)	(Actual hours x actual rate) - (actual hours x budgeted rate)	Production manager
Direct labour efficiency	(Actual hours - hours allowed for actual output) x budgeted rate	Production manager
Variable overhead spending	(Actual driver quantity x actual rate) - (actual driver quantity x budgeted rate)	Shared
Variable overhead efficiency	(Actual driver quantity - quantity allowed for actual output) x budgeted rate	Shared
Fixed overhead rate	Budgeted fixed overhead / budgeted driver quantity	-
Fixed overhead spending	Actual fixed overhead - budgeted (static) fixed overhead	Profit / investment centre manager
Production volume	Budgeted fixed overhead - (driver quantity allowed for actual output x fixed rate). U = under-allocated	Profit / investment centre manager (a capacity signal)

Reconciling budgeted and actual profit

Step	Remember
Start	Static budget operating profit
Sales	+/- sales-volume variance (contribution margin), then +/- selling-price variance
Variable costs	+/- price and efficiency variances for materials, labour and variable overhead
Fixed costs	+/- fixed overhead spending variance
Finish	= actual operating profit. When fixed overhead is a lump sum in both budgets, the production volume variance is an allocation and capacity signal, not a line in this bridge

Interpreting variances

Pattern	Possible causes and links
Favourable price or spending	Skilful negotiation, bulk or early-payment discounts, oversupply, cheaper supplier or substitute, lower-graded (cheaper) staff
Unfavourable price or spending	Shortages, price rises, overtime premiums, more experienced (higher-paid) staff, pay rises
Favourable efficiency	Skilled workers, good scheduling, better materials, well-maintained machines
Unfavourable efficiency	Less skilled workers, poor scheduling, breakdowns, poorer materials
Linked pairs to look for	Price up / volume down; cheap material / more usage; cheaper staff / more hours; hours drive overhead
Any variance	May simply be a wrong budget: acceptable once, a warning sign if it recurs
Capacity questions	Production volume variance U: falling demand? quality? prices too high? new or aggressive rivals? Plan capacity up or down to match

Behavioural aspects

Idea	Remember
Goal congruence	Individual goals line up with organisational goals; poorly managed budgets cause dysfunctional behaviour
Top-down	Quick and cheap; less local knowledge; weak commitment; over-stretched targets discourage people
Bottom-up (participative)	Commitment, coordination, creativity; slow and costly; politics; risk of pseudo participation and slack
Budgetary slack	Revenue understated or costs overstated to make the target easy. Test against history, forecasts and independent evidence; reward accurate estimates
Myopia	Short-term results bought at long-term cost (e.g. cutting maintenance or training)
Incentives	Combine monetary and non-monetary; judge how results came about, how stretching the targets were, the risks taken and whether results can last