

OCR A Level Business: Finance & Accounting 1

Knowledge Organiser: Finance and Accounting

Financial objectives

- Return on capital employed (ROCE) targets
- Shareholders' returns
- Cost minimisation
- Cash flow targets

Reasons for setting financial objectives

- Act as a focus for decision making and effort
- Provide a yardstick against which success or failure can be measured
- Improves coordination
- Improves efficiency
- Allows shareholders to assess whether the business is going to provide a worthwhile investment
- Enables outside organisations (suppliers and customers), to confirm the financial viability of a business

Internal influences on FO

- Corporate objectives
- Nature of the product that is sold
- Objectives of the senior managers
- Finance
- Human resources
- Operational factors
- Resources available

External influences on FO

- PESTLE analysis
- Actions of other businesses
- Market factors
- Suppliers

Cost Centres & Profit Centres

Cost centre - An identifiable part of an organisation where costs can be calculated

Profit centre - An identifiable part of an organisation where costs and revenue can be calculated

- You need to be able to allocate all costs to a certain area
- if you can calculate revenues as well as costs can calculate profit (Total revenues - total costs)
- These are often used with budgets to assist with financial planning and control

Uses of Cost and Profit centres

- They allow the business to compare performance between departments / across products / brands etc
- This allows the business to make decisions about underperforming areas
- if a profit centre is identified as doing well businesses may want to focus on the reasons behind this
- They allow a more focused study of a firms finances
- Benchmarking can take place
- Responsibility for a profit / cost centre will motivate the individual responsible
- By placing responsibility with the person involved in the activity the finances may be run more efficiently than would be the case if a more remote, senior manager controlled it.

ACCOUNTING CONCEPTS

Going Concern

Accountants assume, unless there is evidence to the contrary, that a company is a going concern. This has important implications for the valuation of assets and liabilities.

Consistency

Transactions and valuation methods are treated the same way from year to year, or period to period. Users of accounts can, therefore, make more meaningful comparisons of financial performance from year to year. Where accounting policies are changed, companies are required to disclose this fact and explain the impact of any change.

Prudence

Profits are not recognised until a sale has been completed. In addition, a cautious view is taken for future problems and costs of the business (the are "provided for" in the accounts) as soon as there is a reasonable chance that such costs will be incurred in the future.

Matching (or "Accrual")

Income should be properly "matched" with the expenses of a given accounting period

Realisation

With this convention, accounts recognise transactions (and any profits arising from them) at the point of sale or transfer of legal ownership - rather than just when cash actually changes hands.

Neutrality

Where decisions are required about the appropriate needs of a particular accounting judgement, the "neutrality" convention suggests that this should only be an issue if the judgement is "significant" or "material" to a user of the accounts.

Objectivity

This implies that accounting information is prepared and reported in a "neutral" way. In other words, it is not biased towards a particular user group or vested interest.

Absorption Costing: All overheads are allocated to different products or areas based on revenue or direct costs

Marginal Costing: The cost of producing one more (variable costs)

Contribution: The amount from each sale being put towards fixed costs **Profit = Total Contribution - Fixed Costs**

Contribution per Unit (CPU) = Selling Price - Variable Costs **Total Contribution = CPU X Output**

Special Order: A special order is an extra order or an order for an item specially requested by a customer, normally at a cheaper price. The business has to decide whether to accept this order or not. Benefits are some contribution, develop relationships and future orders but downsides might be to miss other orders, impact on current customer relationships and potentially extra cost created.

Target Level of Profit=

$$\frac{\text{Fixed Costs} + \text{Target Level of Profit}}{\text{Selling Price} - \text{Variable Costs}}$$

$$\text{Selling Price} - \text{Variable Costs}$$

Break-even forecast

A prediction about the break-even quantity based on estimates of future sales revenues and costs

Break-even quantity

The amount a business must sell to earn enough revenue to cover its costs

Margin of safety

The amount by which a business' actual output is greater than its break-even output

Businesses use information about revenues and costs to calculate the break-even level of output - more useful to new businesses



Main Sources of Business Finance

LONG-TERM	MEDIUM-TERM	SHORT-TERM
Finances the whole business over many years	Finances major projects or assets with a long-life	Finances day-to-day trading of the business
Examples:	Examples:	Examples:
Share capital Retained profits Venture capital Mortgages Long-term bank loans	Bank loans Leasing Hire purchase Government grants	Bank overdraft Trade creditors Factoring

	Calculation
Revenue	Quantity sold x selling price
Variable costs	Quantity sold x variable cost per unit
Total costs	Fixed costs + variable costs
Profit	Revenue - costs
Average Costs/Unit Costs	Total Costs ÷ Number of Units

- FIXED COSTS** - Costs don't change over a period of time and don't vary with output
- VARIABLE COSTS** - Costs that vary change over a period of time and also vary with output
- SEMI-VARIABLE COSTS** - These costs have fixed and variable elements of production



Direct and Indirect cost

Direct cost is a cost.

Direct Cost: Direct costs are those cost that have directly accountable to specific cost object such as a process or product
Ex: wages paid, salary paid, labor, material...etc

Indirect cost: Indirect cost are those costs which are not directly accountable to specific cost object or not directly related to production
Ex: Insurance, maintenance, telecom...etc

Calculating break even

$$\frac{\text{Total fixed costs}}{\text{Selling price} - \text{variable costs per unit}}$$



OCR A Level Business: Finance & Accounting 2

Knowledge Organiser: Finance and Accounting

Budgets are an estimate of income and expenditure for a set period of time. Budgets are used to:

- Control income and expenditure (the traditional use)
- Establish priorities and set targets in numerical terms
- Provide direction and co-ordination, so that business objectives can be turned into practical reality
- Assign responsibilities to budget holders (managers) and allocate resources
- Communicate targets from management to employees
- Motivate staff
- Improve efficiency
- Monitor performance

Variance analysis is used to calculate the difference between any actual and budgeted figures.

After calculation the variance should be interpreted as follows:

Favourable variances mean that the actual performance of the organisation has been better than expected – **likely to increase profit**

Adverse variances mean that the actual performance has been worse than expected – **likely to reduce profit**

Cash Flow

Opening Balance= Last month's closing balance

Net Cash Flow= Inflows – Outflows

Closing Balance= Opening Balance + Net Cash Flow

Cash flow is the difference between the amount of cash a company receives and pays, whereas profitability is the difference between revenues and expenses



DEPRECIATION - a reduction in the value of an asset over time, due in particular to wear and tear or new technology

Straight Line Depreciation = $\frac{\text{Initial Cost} - \text{Residual Value}}{\text{Useful Life in Years}}$

Useful Life in Years	
Advantages	Disadvantages
<ul style="list-style-type: none"> Makes accounts look better in first few years of an assets life Considers Life of Asset 	<ul style="list-style-type: none"> Useful Life and Residual Values are estimates Less accurate as assets lose more value in first few years

Reducing (Declining) Balance

This correlates to the percentage the asset will depreciate by each year

Advantages	Disadvantages
<ul style="list-style-type: none"> More reflective of assets value over time No need for residual value or useful life of an asset 	<ul style="list-style-type: none"> Accounts and value of business can look worse as assets worth less – hard to get finance Less accurate as assets lose more value in first few years

Net Book Value = In the IC Cost – Accumulated Depreciation
Residual Value = Re-sale price of a asset after use of life

Investment Appraisal: The process of analysing whether an investment is worthwhile

Payback	The payback period is the time it takes for a project to repay its initial investment	Advantages: Shows level of risk, Easy to calculate and interpret, Good for use in changing markets	Drawbacks: Cash flows are estimates, Does not consider value of money over time, Only considers time to pay back not profitability
Average Rate of Return (ARR)	Average Rate of Return: this measures the average annual profit as a percentage of the initial investment $\frac{\text{Average Annual Profit}}{\text{Initial Cost}} \times 100$	Advantages: Considers profits linked to an investment, Considers life of the project	Drawbacks: Cash flows are estimates, Does not consider value of money over time, Only considers time to pay back not profitability, Years of life an estimate
Net Present Value (NPV)	The present value of the expected future cash flows minus the cost Total of (Current Value X	Advantages: Considers value of money over time, Considers all cash flow	Drawbacks: Discount factor and estimate by business, Cash inflows and estimate
A04 Qualitative Factors impacting Investment Decisions	Demand, Market Situation, Economy, Labour Considerations, Finance Available, Cost of each Project, Leadership Choice, Political Factors, Social Factors		

OCR A Level Business: Finance & Accounting 3

Knowledge Organiser: Finance and Accounting

Ratio	Formula	Data	Outcome	Interpretation
Liquidity ratios				
Current ratio	$\frac{\text{Current assets}}{\text{Current liabilities}}$	$\frac{300}{75}$	4.00	This is a broad test of liquidity. Any value above 1 indicates that the firm can pay its short term obligations from its current assets.
Acid test	$\frac{\text{Current assets} - \text{inventories (stock)}}{\text{Current liabilities}}$	$\frac{300 - 100}{75}$	2.67	This is a more stringent test of liquidity in that it recognises that inventory may not be immediately convertible to cash at full book value.
Profitability ratios				
Gross profit margin	$\frac{\text{Gross profit} \times 100}{\text{Revenue}}$	$\frac{260 \times 100}{750}$	34.67%	Measures how much of each £1 of sales becomes gross profit. The larger the percentage the better and may indicate both the amount of value the business is able to add and the nature of competition in its market.
Net profit margin	$\frac{\text{Profit before interest and tax} \times 100}{\text{Revenue}}$	$\frac{90 \times 100}{750}$	12.00%	Measures how much of each £1 of sales becomes net profit. It is acceptable to use operating profit instead of PBIT in the calculation. The larger the percentage the better. By taking profit before interest and tax it is possible to measure the aspects over which the business has control. If profit was after interest and tax, then a rise in interest and tax rates would depress rpm and so make the business look less profitable, whereas managers are not able to control these factors. If the detail in the income statement does not include PBIT, then it is acceptable to use profit for the year, with a note to explain that this is an approximation.
Return on capital employed (ROCE)	$\frac{\text{Operating profit} \times 100}{\text{Capital employed (Total equity + non-current liabilities)}}$	$\frac{110 \times 100}{330 + 495}$	13.33%	The most fundamental measure of business financial performance and efficiency, in that it measures what comes out, profit, to what goes in, capital employed. The higher the percentage the better and the more efficient the business is in turning capital into profit.
Return on equity	$\frac{\text{Profit for the year} \times 100}{\text{Total equity}}$	$\frac{52 \times 100}{495}$	10.51%	Measures the amount the shareholders are getting back for every £1 of equity investment. Given that shareholders are likely to have a financial objective, the higher the percentage the better.
The following ratios are ONLY examined at A Level				
Solvency ratios				
Gearing	$\frac{\text{Non-current liabilities}}{\text{Capital employed (Total shareholders' equity + non-current liabilities)}} \times 100$	$\frac{330 \times 100}{495 + 330}$	40.0%	This shows the extent to which the business relies on debt (external) funding in its long term capital structure. High gearing has the effect of magnifying the EPS and P/E ratios.
Interest cover	$\frac{\text{Profit before interest and tax (PBIT)}}{\text{Finance costs (Interest payable)}}$	$\frac{90}{20}$	4.5 times	This shows how many times the business is able to pay its interest commitment from the year's profits. The larger the value the less the risk. A value less than 1.0 means that the business is unable to pay its interest and this may lead to loan foreclosure.

Efficiency ratios				
Creditor turnover (Creditor/trade payables payment period)	$\frac{\text{Cost of sales}^*}{\text{Trade payables (creditor)}}$	$\frac{490}{60}$	8.2 times	creditor 8.2 times per year i.e. it takes 44.7 days to settle its invoices. A business would want a long creditor payment period. Technically, the creditor turnover/collection period should be based on just credit purchases and not on all purchases.
	$\frac{\text{Trade payables (creditor)} \times 365}{\text{Cost of sales}^*}$	$\frac{60 \times 365}{490}$	44.7 days	
*where purchases on credit are known they should be used instead of cost of sales.				
Debtor/receivables turnover (Debtor collection period)	$\frac{\text{Revenue}^*}{\text{Trade receivables (debtor)}}$	$\frac{750}{150}$	5.0 times	On average the company collects payment from its customers 5 times per year, i.e. debtors have an average collection period of 73 days. A business would want a short debtor collection period. Technically the debtor turnover/collection period should be based on just credit sales and not revenue.
	$\frac{\text{Trade receivables (debtor)} \times 365}{\text{Revenue}^*}$	$\frac{150 \times 365}{750}$	73.0 days	
*where credit sales are known they should be used instead of revenue.				
Non-current assets turnover	$\frac{\text{Revenue}}{\text{Non-current assets}}$	$\frac{750}{600}$	1.25	This measures the relationship between non-current assets and revenue. For every £1 invested in non-current assets this business generates £1.25 of sales. The higher the value the more productive are the assets.
Stock (inventory) turnover	$\frac{\text{Cost of sales}}{\text{Inventories (stock)}}$	$\frac{490}{100}$	4.9 times	On average the company turns stock into sales 4.9 times per year. The larger the number the more active is the business. On average, the entire stock turns over every 75 days.
	$\frac{\text{Inventories (stock)} \times 365}{\text{Cost of sales}}$	$\frac{100 \times 365}{490}$	74.5 days	
Shareholder ratios				
Dividend per share (DPS)	$\frac{\text{Dividend}}{\text{Number of shares in issue}}$	$\frac{40}{200}$	£0.20	Unless dividends exceed profit for the year i.e. dividends are paid out of previous years' earnings, DPS must be less than EPS. It shows the actual cash reward to each share.
Dividend yield	$\frac{\text{DPS} \times 100}{\text{Share price}}$	$\frac{0.20 \times 100}{5.00}$	4.0%	Compares the reward from dividends to the opportunity cost of having the share. The larger the percentage the better for shareholders.
Earnings per share (EPS)	$\frac{\text{Profit for the year}}{\text{Number of ordinary shares in issue}}$	$\frac{52}{200}$	£0.26	This shows the extent to which the business relies on debt (external) funding in its long term capital structure. High gearing has the effect of magnifying the EPS and P/E ratios.
Price/earnings ratio	$\frac{\text{Share price}}{\text{EPS}}$	$\frac{5.00}{0.26}$	19.2 times	A measure of market confidence in that the market values the business at a 19.2 times multiple, hence the larger the value the more confident the market is that the business will continue to generate reward for its shareholders.

Income statement for the year ended 31 January 2016

	£000s
Revenue	750
Cost of sales	490
Gross profit	260
Expenses	150
Operating profit	110
Depreciation	20
Profit before interest and tax (PBIT)	90
Finance costs	20
Profit before tax	70
Tax	18
Profit for the year	52
Dividends	40
Retained profit	12

Statement of financial position as at 31 January 2016

	£000s	£000s	£000s
Non-current assets			
Intangible assets	50		
Property, plant & equipment	540		
Investments	10		
			600
Current assets			
Inventories	100		
Trade and other receivables	150		
Cash and cash equivalents	50		300
TOTAL ASSETS			900
Current liabilities			
Trade and other payables	60		
Overdraft	15		75
Non-current liabilities			
Loan			330
Capital & Reserves attributable to equity holders			
Share capital	200		
Retained earnings	295		495
TOTAL EQUITY & LIABILITIES			900

Note: both of the above formats are acceptable and the number of columns used in each statement can vary.

Additional information: 200,000 £1 ordinary shares. Current share price = £5.00

Statement of financial position as at 31 January 2016

	£000s	£000s	£000s
Non-current assets			
Intangible assets	50		
Property, plant & equipment	540		
Investments	10		
			600
Current assets			
Inventories	100		
Trade and other receivables	150		
Cash and cash equivalents	50		300
Current liabilities			
Trade and other payables	60		
Overdraft	15		75
Net current assets			
			225
Non-current liabilities			
Loan			330
Net assets			
			495
Capital & Reserves attributable to equity holders			
Share capital	200		
Retained earnings	295		495
TOTAL EQUITY			495

Use of Financial Ratios

- Financial ratios may be used by managers within a firm, by current and potential shareholders (owners) of a firm, and by a firm's creditors.
- Financial analysts use financial ratios to compare the strengths and weaknesses in various companies.
- If shares in a company are traded in a financial market, the market price of the shares is used in certain financial ratios.

Limitations of Ratios

- Difficult to identify industry categories or comparable peers.
- Published peer group or industry averages are only approximations.
- Industry averages may not provide a desirable target ratio or norm.
- Accounting practices differ widely among firms.
- A high or low ratio does not automatically lead to a specific favorable or unfavorable conclusion.
- Seasons may bias the numbers in the financial statements.