

F3 STUDY NOTES

Objectives

Chapter 1

Mission:

Fundamental objectives of an entity. Why the organization exists

Mission statement:

Mission of the company in a written statement.

Different types of entities:

1. For profit and not-for profit
2. Unincorporated and incorporated
3. Quoted and unquoted entities
4. Private sector and public sector entities.

Every entity has a different objective:

For a for-profit entity the major goal would be the maximization of wealth of the shareholders.

For a not-for profit or a public sector company the major goal would be **to benefit the prescribed group of people.**

Objectives of any organization have to be SMART

Stakeholders:

Anyone who has an interest in the strategy of an entity is known as a stakeholder.

Financial objectives of for-profit entities:

1. Equity investors.
2. Finance providers
3. Risk exposure

Specific financial objectives could be:

1. Return to investors: $(P1 - P0 + \text{Dividend}) / P0$
2. Cash generation
3. Value added (Revenue - cost of purchased material)
4. Profitability
5. Return on assets
6. Market share
7. Competitive position.

Non-financial objectives for profit entities:

1. Company employees
2. Suppliers
3. The government
4. Community at large
5. Environmental concerns
6. Customer pressure
7. Customer satisfaction.

Specific non-financial objectives would be: HINSR

1. Human
2. Intellectual
3. Natural
4. Social

5. Relationship

Not for profit entities:

Any not for profit organizations objectives are measured with the help of a VFM audit.

The VFM audit has 4 main elements:

- 1. Economy (deals with inputs)**
- 2. Efficiency (Process of turning inputs into outputs)**
- 3. Effectiveness (deals with outputs)**
- 4. Equity (spending fairly, how available are your services)**

In practice VFM is a relative measure rather than an absolute measure. Good value for money can be defined as optimal use of resources to achieve intended outcomes.

Implications of international operations/expansion:

1. Competition
2. Country factors
3. Benefits to customers
4. Economies of scale
5. Risk management

Financial implications:

1. Impact on financial statements
2. Impact on cost of capital

Evaluation of financial performance:

1. Profitability ratios:

- a) Gross profit margin= Gross profit/revenue * 100
- b) Operating profit margin= Gross profit- operating expenses/revenue * 100
- c) Net profit margin= Gross profit-operating expenses- finance charge/revenue *100
- d) EBITDA= Earnings before interest, tax, depreciation and amortization. It's also called earnings before the bad bits.
- e) ROCE= it measures managements efficiency in generating profits from the resources available. Operating profit/capital employed * 100. Capital employed= Shareholders funds + long term debt or total assets – current liabilities.
- f) ROE= gives an indication of how well the company has performed in relation to its shareholders. Net profit/equity * 100.
- g) Asset turnover= Revenue/capital employed. It shows how much revenue is produced per \$ of investment.

h) ROCE= Operating profit margin * Asset turnover.

Lender ratios:

Gearing is the mix of debt to equity within a firm's permanent capital.

There are two particularly useful measures:

- 1. Capital gearing – a statement of financial position (balance sheet) measure.**
- 2. Interest cover – a statement of profit or loss measure.**

Capital gearing – a measure of capital structure

There are two key measures of capital gearing:

Capital gearing =

$$\begin{aligned} & \underline{\text{Debt/Equity} \times 100} \\ & \text{OR} \\ & \underline{\text{Debt/Debt + Equity} \times 100} \end{aligned}$$

Constituent elements of debt and equity

Debt includes redeemable preference shares, bank borrowings and bonds (overdrafts may be included if they are long-term finance sources).

Equity includes ordinary and irredeemable preference shares (plus reserves if the valuation is at book value)

Market values and book values:

Wherever possible, market values should be used in preference to book values for the capital gearing ratio.

When using market values, care must be taken when calculating the market value of equity: When equity is valued using book values it must include any reserves and retained profits that are attributable to the ordinary shareholders that is:

Book value of equity = ordinary share capital + reserves

When market values are used, reserves must be excluded since they are considered to be already incorporated into the market price of the shares, that is:

Market value of equity = Number of shares × Share price

Interest cover

The interest cover ratio indicates the number of times profits will cover the interest charge; the higher the ratio, the better.

Interest cover = Profit before interest and tax/Interest payable

The interest cover ratio is used by lenders to determine the vulnerability of interest payments to a drop-in profit.

As an alternative to the formula shown here, investors often use EBITDA rather than profit before interest and tax in the formula, because EBITDA is a better approximation to the cash generated by the business (and available to pay interest with).

Investor ratios:

Investors will wish to assess the performance of the shares they have invested in (against competing entities in the same sector, against the market as a whole, and over time).

Market price per share

Ex-dividend means that in buying a share today, the investor will not participate in the forthcoming dividend payment.

Arguably the investor will be willing to pay a higher price for the share, knowing that a dividend payment is forthcoming in the near future.

The relationship between the cum-dividend price and the ex-dividend price is then:

Ex-dividend market price = Cum-dividend market price Forthcoming dividend per share.

Earnings per share (EPS)

EPS = Earnings/Number of ordinary shares in issue

where Earnings = Profit distributable to ordinary shareholders, i.e. after interest, tax and any preference dividend.

P/E ratio:

The P/E ratio is a measure of growth; it compares the market value (a measure of future earnings) to the current earnings.

P/E ratio = Current share price/EPS or, alternatively, Total market capitalization/Total earnings

The higher the P/E ratio, the greater the market expectation of future earnings growth. This may also be described as market potential.

Earnings yield:

The P/E ratio is the reciprocal

Earnings yield = EPS/Current share price or, alternatively, Total earnings/Total market capitalization.

The market price will incorporate expectations of all buyers and sellers of the entity's shares, and so this is an indication of the future earning power of the entity.

Dividend-pay out rate:

The cash effect of payment of dividends is measured by the dividend-payout rate.

Pay-out rate = Dividend per share/EPS or, alternatively, Total dividend/Total earnings.

The relationship between the above investors' ratios is usually that an entity with a high P/E ratio has a low dividend pay-out ratio as the high growth entity needs to retain more resources in the entity. A more stable entity would have a relatively low P/E ratio and higher dividend-pay-out ratio.

Dividend yield:

This is the relationship of the dividend paid to the current market value of a share.

Dividend yield = Dividend per share/Current share price or, alternatively, Total dividend/Total market capitalization.

However, the dividend represents only part of the overall return from a share.

The other part of the return is the capital gain from an increase in the value of the share. The capital gain from a share may well be far more significant than the dividend.

Dividend cover:

Dividend cover measures the ability of the entity to maintain the existing level of dividend and is used in conjunction with the dividend yield.

Dividend cover = Earnings per share/Dividend per share or, alternatively, Total earnings/Total dividend.

The higher the dividend cover the more likely it is that the dividend yield can be maintained.

Dividend cover also gives an indication of the level of profits being retained by the entity for reinvestment by considering how many times this year's dividend is covered by this year's earnings.

Earnings growth and dividend growth:

An analysis of growth rates of earnings and dividends can enable investors to make an assessment of the performance of an entity.

High growth rates in earnings and dividends are usually viewed positively.

Calculations

The growth rate for a single year is:

$$[(\text{current figure}/\text{last year's figure}) - 1] \times 100\%$$

Over a number of years (n), the implied compound annual growth rate is:

$$[\sqrt[n]{(\text{current figure}/\text{earliest year's figure})} - 1] \times 100\%$$

So for example, if earnings per share have grown from \$0.28 to \$0.33 over a 4 year period, the implied compound annual growth rate is:

$$[\sqrt[4]{(0.33/0.28)} - 1] \times 100\% = 4.19\% \text{ per year}$$

The effects of interest rate changes:

Changes in interest rates affect the economy in many ways. The following consequences are the main effects of an increase in interest rates:

1. Spending falls –

Expenditure by consumers, both individual and business, will be reduced. This occurs because the higher interest rates raise the cost of credit and deter spending.

2. Asset values fall –

The market value of financial assets will drop, because of the inverse relationship

3. Foreign funds are attracted into the country –

A rise in interest rates will encourage overseas financial speculators to deposit money.

4. The exchange rate rises–

The inflow of foreign funds raises demand for the domestic currency and so pushes up the exchange rate.

5. Inflation falls –

Higher interest rates affect the rate of inflation in three ways. First, less demand in the economy may encourage producers to lower prices in order to sell.

The effects of inflation:

1. Distorts consumer behavior –

People may bring forward purchases because they fear higher prices later. This can cause hoarding and so destabilize markets, creating unnecessary shortages.

2. Redistributes income –

People on fixed incomes or those lacking bargaining power will become relatively worse off, as their purchasing power falls. This is unfair.

3. Affects wage bargainers –

Trades unionists on behalf of labour may submit higher claims at times of high inflation,

4. Undermines business confidence
5. Weakens the country's competitive position
6. Redistributes wealth–

If the rate of interest is below the rate of inflation, then borrowers are gaining at the expense of lenders. This wealth is being redistributed from savers to borrowers and from payables to receivables. As the government is the largest borrower, via the national debt, it gains most during inflationary times.

Parity theories:

1. Interest rate parity

Interest rate parity

$$F_0 = S_0 \times \frac{(1 + r_{\text{var}})}{(1 + r_{\text{base}})}$$

where

S_0 = spot rate of exchange

F_0 = forward rate of exchange

The interest rate parity theory shows that the forward rate of exchange can be found by adjusting the spot rate of exchange to reflect the differential in interest rates between the two countries

2. Expectations theory:

Expectations theory

$$S_1 = S_0 \times \frac{(1 + r_{\text{var}})}{(1 + r_{\text{base}})}$$

where

S_0 = spot rate of exchange

S_1 = expected rate of exchange in one year

The expectations theory shows that the spot rate in the future can be forecast by adjusting the spot rate of exchange to reflect the differential in interest rates between the two countries.

Limitations of published account:

1. Published accounts are historic records, not forward-looking.
2. The statement of profit or loss is prepared using the accruals concept, so it is difficult to relate the figures to the entity's cash position. However, the inclusion of the cash flow statement in the published accounts helps to give an impression of the cash position.
3. The published accounts have historically contained only financial information.