Formulation of Financial Strategy
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Learning Outcomes

After completing this chapter you should be able to:

- discuss the potential strategic financial objectives that an entity may have;
- identify an entity’s objectives in financial terms and evaluate their attainment;
- discuss the interrelationships between decisions concerning investment, financing and dividends;
- identify, analyse and discuss the impact of internal and external constraints on financial strategy, including the impact of regulation on business combinations;
- evaluate current and forecast performance, taking account of potential variations in economic and business factors;
- recommend alternative financial strategies for an entity.

1.1 Introduction

In this chapter we identify the financial and non-financial objectives of different entities; the three key decisions of financial management and their links; economic forces affecting financial plans; regulatory requirements; modelling and forecasting of cash flows and financial statements; dividend policy; and current and emergency issues in financial reporting.

**Strategy:** A course of action, including the specification of resources required, to achieve a specific objective. (CIMA Official Terminology, 2005)

Financial strategy is the aspect of strategy which falls within the scope of financial management, which will include decisions on investment, financing and dividends.

**Strategic financial management:** The identification of the possible strategies capable of maximising an entity’s net present value, the allocation of scarce capital resources among the competing opportunities and the implementation and monitoring of the chosen strategy so as to achieve stated objectives. (CIMA Official Terminology, 2005)
1.2 Objectives of profit-making entities

The definitions above both indicate that strategy depends on objectives. For a profit-making entity the main strategic objective is to optimise the wealth of the proprietors, which means achieving the maximum profit possible consistent with balancing the needs of the various stakeholders in the entity, including shareholders, fund lenders, customers, suppliers, employees and government (in terms of taxation and legal constraints on operations). The health of the entity also depends on a proper balance being achieved between long-term projects and short-term opportunities, a major constraint against the latter being that they must not be taken where there is a significant risk that they will damage long-term viability.

If all these factors can be effectively balanced the result should be the achievement of the overriding strategic financial management objective of maximising shareholder value.

The following statement of objectives is taken from the website of Nestle (www.nestle.com)

Since Henri Nestlé developed the first milk food for infants in 1867, and saved the life of a neighbour’s child, the Nestlé Company has aimed to build a business based on sound human values and principles.

While our Nestlé Corporate Business Principles will continue to evolve and adapt to a changing world, our basic foundation is unchanged from the time of the origins of our Company, and reflects the basic ideas of fairness, honesty and a general concern for people.

Nestlé is committed to the following Business Principles in all countries, taking into account local legislation, cultural and religious practices:

- Nestlé’s business objective is to manufacture and market the Company’s products in such a way as to create value that can be sustained over the long term for shareholders, employees, consumers and business partners.
- Nestlé does not favour short-term profit at the expense of successful long-term business development.
- Nestlé recognises that its consumers have a sincere and legitimate interest in the behaviour, beliefs and actions of the Company behind brands in which they place their trust, and that without its consumers the Company would not exist.
- Nestlé believes that, as a general rule, legislation is the most effective safeguard of responsible conduct, although in certain areas, additional guidance to staff in the form of voluntary business principles is beneficial in order to ensure that the highest standards are met throughout the organisation.
- Nestlé is conscious of the fact that the success of a corporation is a reflection of the professionalism, conduct and the responsible attitude of its management and employees. Therefore, recruitment of the right people and ongoing training and development are crucial.
- Nestlé continues to maintain its commitment to follow and respect all applicable local laws in each of its markets.

1.2.1 Financial objectives

For a profit-making entity the main strategic objective is to optimise the wealth of the proprietors. In other words, the objective is assumed to be to maximise shareholder wealth.

Shareholder wealth may be measured by the return that shareholders receive from their investment, represented partly by the dividend received each year and partly by the capital
gain from the increase in the value of the shares over that period. The value of the shares should increase when the entity is expected to make additional profits that will be paid out as dividends or reinvested for future growth.

1.2.2 Stakeholders

*Stakeholders:* Those persons and entities that have an interest in the strategy of an entity. Stakeholders normally include shareholders, customers, staff and the local community. (CIMA Official Terminology, 2005)

The various stakeholder groups may have different interests in the activities of an entity, and may seek to influence objectives of the entity. The stakeholders include:

- Shareholders – maximisation of wealth from their investment.
- Fund lenders – receipt of interest and capital repayments by the due date.
- Customers – a continuous trading relationship with suppliers, reflecting product/service quality and price.
- Suppliers – to ensure that they are paid in full by the due date.
- Employees – to maximise rewards paid to them in salaries and benefits, and continuity of employment.
- Government – may have the broad objectives of sustained economic growth and maintaining levels of employment.

Faced with such a broad range of stakeholders, managers are likely to find they cannot simultaneously maximise the wealth of their shareholders and keep all the other stakeholders content. In practice, the main strategic objective may be interpreted as achieving the maximum profit possible consistent with balancing the needs of the various stakeholders in the entity. Such a policy may imply achieving a satisfactory return for shareholders, whilst establishing competitive terms and conditions of service for the employees, and avoiding polluting the environment.

Economists, and many accountants, believe that cash flow is the main criterion to judge an entity’s performance. Cash is a fact, whereas profit can be manipulated by accounting policies. Entities have in fact gone out of business because of a lack of funds, even though they were profitable. In reality, shareholder wealth is based on the present value of future cash flows.

Managers in practice may have broader objectives – perhaps undertaking any financing, investment, or dividend decision that will achieve *satisfactory* returns rather than those that may *optimise* returns.

**Financial targets**

Subsidiary objectives (or financial targets) may be employed. These include:

- *Increasing earnings per share.* For example, to increase eps by 5% per annum.
- *Borrowing levels.* For example, to maintain a gearing ratio below 30%.
- *Increasing cash flows and dividends.* For example, to increase operating cash flow and dividend per share year-on-year by at least 4%, which is 2.5% above the current rate of inflation.
- *Profit retention.* For example, distributable profits must always be two times higher than the annual dividend.
1.2.3 Non-financial objectives

A profit-making entity may have a number of important non-financial objectives, which may limit the achievement of financial objectives. These may be related to:

- **Customer satisfaction.** Objectives may include meeting defined delivery standards, product quality, reliability and after sales service levels.
- **Welfare of employees.** This covers issues such as the level of wages and salaries, working conditions, training and development, and pensions. It could be argued that pursuit of employee welfare as an objective is detrimental to shareholders as the funds devoted to employees could be utilised elsewhere. However, these policies may help recruitment and retention, and productivity. The overall benefit may exceed cost, but it is difficult to measure.
- **Welfare of management.** Management can set objectives, such as on pay and conditions, that are concerned with their own welfare.
- **Relationships with suppliers.** Objectives could include those relating to the timing of payments and other terms of trade.
- **Responsibilities to society.** Responsibility to society at large is called corporate social responsibility. This would include compliance with relevant laws and regulations, or minimising externalities such as pollution.

The willingness of management to pursue these non-financial objectives is often a matter of goodwill, combined with some external pressure. In other cases legislation will impose non-financial objectives on an entity. The impact on shareholder wealth is difficult to gauge. The trade-off is inevitably between the perceived image from pursuing a particular objective against the cost of doing so.

For example in its annual report for 2004, J. Sainsbury plc, stated the following objectives which recognised in some detail the interests of other stakeholders.

Our objective is to meet our customers' needs effectively and thereby provide shareholders with good, sustainable financial returns. We aim to ensure all colleagues have opportunities to develop their abilities and are well rewarded for their contribution to the success of their business. Our policy is to work with all of our supplies fairly, recognising the mutual benefit of satisfying customers' needs. We also aim to fulfil our responsibilities to the communities and environments in which we operate.

In the example above, the lack of quantification of the objectives would make it difficult for shareholders to challenge their achievement in an Annual General Meeting.

1.2.4 Agency theory

A possible conflict can arise when ownership is separated from the day-to-day management of an entity. In larger entities, the ordinary shares are likely to be diversely held, and so the actions of shareholders are likely to be restricted in practical terms. The responsibility of running the entity will be with the board of directors, who may only own a small percentage of the shares in issue.

The managers of an entity are essentially agents for the shareholders, being tasked with running the entity in the shareholders' best interests. The shareholders, however, have little opportunity to assess whether the managers are acting in the shareholders' best interests.
In investor relations, where ownership is separated from the day-to-day management of an entity, managers may be motivated to behave in ways that are not optimal to the shareholders of the entity:

- Shareholders can spread their risk by investing in a number of entities. Managers have personal and financial capital invested in the entity and so may be averse to investing in a risky investment.
- Shareholder wealth will be maximised by investing in projects with positive net present values. Managers may be more interested in short-term payback than net present value as the investment criterion, in order to help further their own promotion prospects.
- Managers of entities that are subject to a takeover bid often put up a defence to repel the predator. While arguing this action is in the shareholders’ best interests, shareholders of acquired entities often receive large gains in the value of their shares. The managers of the acquired entity often lose their jobs or status.
- Managers may be motivated to award themselves and staff better terms and conditions of service. This will incur costs and reduce profits. If equity investors are losing too much as a consequence, they may sell their shares and the market value of the entity will fall.

**Goal congruence**

In a control system, the state which leads the individuals or groups to take actions which are in their self-interest and also in the best interest of the entity. (CIMA Official Terminology, 2005)

It is evident that an important element within profit-making entities is the extent to which all members of the management team and their staff work together to achieve the strategic objectives of that entity. An aspect of agency theory aims to demonstrate that while various kinds of contract exist, formal and informal (such as job descriptions, departmental responsibilities and office and factory rules), these can only be effective in helping to make an entity successful if there is general acceptance of them in practice, and a concerted effort by all concerned to strive in the same direction, that is, to achieve genuine goal congruence.

**1.2.5 Shareholder value analysis**

Traditionally, managers of limited liability entities have used financial measures such as profit margin and return on assets to assess progress, and have used discounted cashflow measures to assess the viability of projects or investments. Shareholder value analysis
(SVA) is used to bring these three measurement systems into line, and starts from the view that the main objective of the directors of a profit-making entity is to maximise the wealth of the shareholders. It was developed in the 1980’s largely from the work of Alfred Rappaport (Creating Shareholder Value: The New Standard for Business Performance, MacMillan 1986). SVA is covered in more detail in Chapter 5, but a brief introduction is provided here.

An assumption of SVA is that the value of an entity is the net present value of future cash flows, discounted at an appropriate cost of capital. Financing and investment decisions should be evaluated on their ability to maximise value for the shareholders. The inference is that the decision made will be reflected in the share price. Seven key value drivers have been identified that have the greatest impact on share price:

1. Revenue growth rate (per cent)
2. Profit margin (per cent)
3. Cash tax rate (per cent)
4. Working capital/revenue (per cent)
5. Capital expenditure/revenue (per cent)
6. Cost of capital (per cent)
7. Value growth duration period (years).

The ‘value growth duration period’ represents the future period for which the entity has a foreseeable competitive advantage.

SVA is used to indicate the amount of economic value created in a period. It does so by measuring and managing cash flows of the entity that take account of risk and the true value of money. The cash flows used in SVA are the net profits after tax, plus non-cash items, less any investments in working capital and non-current assets. These are known as the ‘free’ cash flows.

**Free cash flow:** Cash flow from operations after deducting interest, tax, preference dividends and ongoing capital expenditure, but excluding capital expenditure associated with strategic acquisitions and/or disposals and ordinary dividends.

(CIMA Official Terminology, 2005)

### 1.3 Objectives of not-for-profit entities

As a general rule, books on financial management, and modern corporate finance theories, are written in the context of the profit-seeking segment of the private sector. Note that the very survival of such entities depends on their being able to identify and satisfy needs and to offer the prospect of an adequate financial return. Those which can hold out such a prospect are able to attract the funds necessary to grow their businesses, while those which cannot must inevitably shrink. Financial management involves not only heeding that discipline but also translating it into a criterion for the allocation of resources within the entity.

In this context, the expression ‘an adequate return’ describes a situation in which the value of outputs (to customers or, in more upmarket situations, ‘clients’) exceeds the value of inputs of all kinds: not just bought-in goods and services and labour, but also capital.
It would be easy to overlook the fact that these profit-seeking entities (even if we include privately owned entities as well as publicly quoted ones) represent only a minority of economic activity. The majority comprises a wide variety of entities which are usually referred to as ‘not-for-profit’. In the private sector, you might think of:

- trades unions, trade associations, employers’ organisations and federations thereof (such as the Confederation of British Industry);
- professional bodies, such as the Chartered Institute of Management Accountants;
- housing associations, friendly societies, clubs and cooperatives;
- charities;
- religious organisations, such as the Church of England.

It is enlightening to ask which of the business imperatives do not apply to such organisations. Can they operate without identifying and satisfying needs? To operate, can they do without adequate investment in resources, and hence the need to attract funds? Is it conceivable that they could do so if the value of their outputs is perceived as being less than the value of inputs? The answers to all these questions must be in the negative. In a way, the expression ‘not-for-profit’ is somewhat misleading: if profit is the legitimate reward for the commitment of funds, why should any entity which requires long-term funding not seek a profit (albeit under a different name, for example surplus of income over expenditure, and with an intention that it be ploughed back)?

So it is with the public sector, of which central government is the most prominent example. Activities in this sector should not be insulated from the application of financial disciplines. Would it make sense, for example for:

- a public sector college to use a different criterion from CIMA Mastercourses?
- a public sector hospital to use a different criterion from a private hospital?

If the rate of return sought by enterprises in the public sector were to be lower than that sought in the private sector, then the result would inevitably be that the public sector would grow (financed by taxation or borrowing) while the private sector would shrink. In short, the criterion used in resource allocation should be the same across all sectors: the value of outputs should exceed the value of inputs.

At this point, however, the distinguishing feature of the ‘not-for-profit’ entities begins to emerge. It is that their customers are not synonymous with their clients. Accountancy institutes use funds supplied by their members to develop their specialism for the benefit of employers and the public. Charities and religious entities use the cash from donors to alleviate suffering or promote a belief. The government takes money from those in employment to give it to those out of work, or from the healthy to give to the sick. All of these redistributions are noble in themselves, but they lack the direct link between consumption and price. It is a well-known economic ‘law’ that as the price of a service at the point of delivery tends towards zero, so demand for it tends towards infinity. Consequently, entities whose income comes from a source other than paying customers are frequently plagued by an excess of demand over supply.

There are variations on the customer/client theme, as follows:

- Some entities have elaborate transfer pricing arrangements, which could allow internal customers to relate cost to value, by reference to:
  - benchmarks derived from prices prevailing in the market economy.
  - the prices quoted by quasi-competitive units within the organisation.
FORMULATION OF FINANCIAL STRATEGY

- In some cases, the clients (e.g. the passengers travelling on some railway routes in the United Kingdom) will contribute towards the cost but the taxpayer meets the balance in the form of a subsidy.
- In other cases, the primary function is a regulatory one, and fees are charged to those being regulated.

To various degrees, however, managers in such entities see their role in terms of rationing their limited resources. Specifically, many are uncomfortable with the concept of value, and retreat into choosing between costs. Resources are assumed to be finite, and the task is seen as trading-off within one time-frame, for example the current fiscal year. On a small scale, for example a church council's decisions could include choosing between a toilet for the disabled or paying for a missionary to go to a far-off land.

On a large scale, governments make a political assessment of what it can raise in taxation and borrowings, and this becomes the total that it can 'afford' to spend. Choices have to be made and confrontation (in this case between spending ministries: Health/Education/Defence, etc.) is inevitable. Lower down the scale, departments use the term *virement* (significantly, a term which is unknown in the private sector) to refer to the need to get permission to offset an overspend on one account against an underspend in another.

1.3.1 Value for money

Value for money may be defined as 'achieving the best possible combination of services from the least resources'. This means maximising benefits for the lowest cost and has three constituent elements:

- **economy**, which is concerned with the cost of inputs required to deliver a defined level of outputs (i.e. inputs/money);
- **efficiency**, which is the ratio of outputs to inputs (i.e. outputs/inputs) and is a measure of productivity;
- **effectiveness**, which measures the value of outcomes from a defined level of outputs (i.e. value/outputs).

Value for money can then be expressed as:

\[
\frac{\text{Inputs}}{\text{Money}} \times \frac{\text{Outputs}}{\text{Inputs}} \times \frac{\text{Value}}{\text{Outputs}} = \frac{\text{Value}}{\text{Money}}
\]

In practice, value for money is difficult to measure, and it is a relative rather than an absolute measure. There will often be different views of what the objectives of a not-for-profit entity should be, and therefore, whether appropriate objectives have been achieved. What value does one put on curing an illness, or saving a life? Should the success of a hospital be measured by shorter waiting list? These are societal matters, the discomfort being one of the reasons they are placed firmly in the public sector, rather than being left to the 'survival of the fittest' philosophy associated with the competitive markets.

A public sector college will measure the number of students, the number of courses, the ratio of lecturers to students, and so on. It will also seek its customers' assessments of the standard of, for example its lecturing and catering, and compare them with preset targets. In the language of strategic financial management, these are answers to the question 'How well did we do what we chose to do?'. You should also be aware, by now, of the
dangers of concentrating on what can be measured. Note, for example that it is possible to measure crime detection, but it is not possible to measure crime prevention; it is possible to measure the extent to which the sick are cured, but not the extent to which sickness is prevented. People can be rewarded on the basis of measurables, but it should come as no surprise if they then skimp on the immeasurables: you get what you measure. Measuring performance is but a part of monitoring progress: assessing potential and changes therein are at least as important.

1.4 Public and private – similarities and differences

Financial management is, on the whole, equally applicable to the not-for-profit sector generally and the public sector in particular. It is worth stressing perhaps, that – in common with the private sector – it is never possible to say whether or not value has been maximised. We do not know what we do not know: specifically, we do not know what opportunities have been missed. This is not a problem for those familiar with devolved authority, as it is the only approach compatible with empowerment: you cannot tell an explorer what to find, or identify what he/she has not found! Some bridge is usually required, from the known to the unknown, for example to relate the value of a unit to the costs of its tangible assets, and to consider what ‘intangibles’ explain the difference. This will often act as a very good attention-directing tool, but recognise it as holding up a mirror: in reality, value is not a function of cost.

The health sector provides other examples. Investments in medical equipment represent decisions to trade in purchasing power now in the expectation of benefits later. These benefits may take the form of increased throughput (and hence reduced waiting lists) or the meeting of needs which would otherwise go unsatisfied. These benefits are not measurable, because it is not possible to measure something which has not yet happened; they are judgemental. But this does not mean that they are not quantifiable and hence capable of evaluation. The main obstacle is usually an unwillingness on the part of those in authority (e.g. politicians) to express value judgements, perhaps because they fear such judgements ‘being taken down and used in evidence against them’.

For the avoidance of doubt, it is worth stressing that values are equally subjective in the private sector. No one pretends that they can measure the effectiveness of a proposed investment in advertising: they forecast the improvement after assessing the likely reactions of competitors, direct customers and ultimate consumers. The management accountant fulfils a vital role in being able to synthesise these judgements together with others (e.g. the volume–cost relationship and the cost of capital) to identify the optimum level of investment they imply. The forecast outcome is logged, so as to provide a benchmark by which to monitor progress.

1.5 Assessing attainment of financial objectives

Traditionally, managers have focused on financial measures of performance and progress. Increasingly, entities in both the private and public sectors are using non-financial indicators to assess success across a range of criteria, which need to be chosen to help an entity meet its objectives.

We discuss a number of common financial and non-financial indicators below.
1.5.1 Financial performance indicators

• **Return to investors.** The return from ownership of shares in a profit-making entity can be measured by the formula:

\[ R = \frac{P_t - \left( P_0 + \text{Divs} \sum_{n=0}^{t} \right)}{P_0} \times 100 \]

This is the capital gain on the investment (the difference between the selling and buying price of the shares), plus dividends received during the period the shares were held.

• **Cash generation.** Poor liquidity is a greater threat to the survival of an entity than is poor profitability. Unless the entity is prepared to fund growth with high levels of borrowings, cash generation is vital to ensure investment in future profitable ventures. In the private sector the alternative to cash via retained earnings is borrowing. In the public sector this choice has not been available in the past, and all growth has been funded by government. However, in the face of government-imposed cash limits, local authorities and other public-sector entities are beginning to raise debt on the capital markets, and are therefore beginning to be faced with the same choices as profit-making entities.

• **Value added.** This is primarily a measure of performance. It is usually defined as revenues less the cost of purchased materials and services. It represents the value added to an entity's products by its own efforts. A problem here is comparability with other industries – or even with other entities in the same industry. It is less common in the public sector, although the situation is changing and many public sector entities – for example those in the health service – are now publishing information on their own value added.

• **Profitability.** Profitability may be defined as the rate at which profits are generated. It is often expressed as profit per unit of input (e.g. investment). However, profitability limits an entity's focus to one output measure – profit. It overlooks quality, and this limitation must be kept in mind when using profitability as a measure of success. Profitability as a measure of decision-making has been criticised because:
  – it fails to provide a systematic explanation as to why one business sector has more favourable prospects than another;
  – it does not provide enough insight into the dynamics and balance of an entity's individual business units, and the balance between them;
  – it is remote from the actions that create value, and cannot therefore be managed directly in any but the smallest entities;
  – the input to the measure may vary substantially between entities.

Nevertheless, it is a well-known and accepted measure which, once the input has been defined, is readily understood. Provided the input is consistent across entities and time periods, it also provides a useful comparative measure. Although the concept of profit in its true sense is absent from most of the public sector, profitability may be used to relate inputs to outputs if a different measure of output is used – for example: surplus after all costs, to capital investment.

• **Return on assets (RoA).** This is an accounting measure, calculated by dividing annual profits by the average net book value of assets. It is therefore subject to the distortions inevitable when profit, rather than cash flows, is used to determine performance. Distorting factors for interpretation and comparison purposes include depreciation policy, inventory revaluations, write-off of intangibles such as goodwill, etc. A further defect is that RoA ignores the time value of money, although this may be of minor concern when inflation is very low.

RoA may not adequately reflect how efficiently assets were utilised: in a commercial context, taking account of profits but not the assets used in their making, for whatever
reason, would overstate an entity’s performance. In the public sector, the concept of profit is absent, but it is still not unrealistic to expect entities to use donated assets with maximum efficiency. If depreciation on such assets were to be charged against income, this would depress the amount of surplus income over expenditure. Other points which may affect interpretation of RoA in the public sector are:

- difficulty in determining value;
- there may be no resale value;
- are for use by community at large;
- charge for depreciation may have the effect of ‘double taxation’ on the taxpayer.

1.5.2 Non-financial performance indicators

- **Market share.** A performance indicator that could conceivably be included in the list of financial measures, market share is often seen as an objective for an entity in its own right. However, it must be judged in the context of other measures such as profitability and shareholder value. Market share, unlike many other measures, can take quality into account – it must be assumed that if customers do not get the quality they want or expect, then the entity will lose market share.

  Gaining market share must be seen as a long-term goal of entities to ensure outlets for their products and services, and to minimise competition. However, market share can be acquired only within limits if a monopoly situation is to be avoided.

  It is a measure that is becoming increasingly relevant to the public sector – for example universities and health provision. Health providers must now ‘sell’ their services to trusts established to ‘buy’ from them. Those providers which are seen to fail their customers will lose market share as the trusts will buy from elsewhere (within certain limits).

- **Customer satisfaction.** This can be linked to market share. If customers are not satisfied they will take their business elsewhere and the entity will lose market share and go into liquidation. Measuring customer satisfaction is difficult to do formally, as the inputs and outputs are not readily defined or measurable. Surveys and questionnaires may be used but these methods have known flaws, mainly as a result of respondent bias. It can of course be measured indirectly by the level of sales and increase in market share.

- **Competitive position.** The performance of an entity must be compared with that of its competitors to establish a strategic perspective. A number of models and frameworks have been suggested by organisational theorists as to how competitive position may be determined and improved. A manager needing to make decisions must know by whom, by how much, and why he is gaining ground or being beaten by competitors. Conventional measures, such as accounting data, are useful but no one measure is sufficient. Instead, an array of measures is needed to establish competitive position. The most difficult problem to overcome in using competitive position as a success factor is in collecting and acquiring data from competitors.

  The public sector is increasingly in competition with other providers of a similar service both in the private and public sectors. For example hospitals now have to compete for the funds of health trusts. Their advantage is that it is easier to gain access to data from such competitors than it is in the private sector.

- **Risk exposure.** Risk can be measured according to finance theory. Some risks – for example exchange-rate risk and interest-rate risk – can be managed by the use of hedging mechanisms. Shareholders and entities can therefore choose how much risk they wish to be exposed to for a given level of return. However, risk can take many forms, and the theory does not deal with risk exposure to matters such as recruitment of senior personnel or competitor activity.
Public sector entities tend to be risk-averse because of the political repercussions of failure and the fact that taxpayers, unlike shareholders, do not have the option to invest their money in less (or more) risky ventures.

1.6 The three key decisions of financial management

The practical applications of financial management can be grouped into three main areas of decisions – investment decisions, financing decisions and dividend decisions – which reflect the responsibilities of acquiring financial resources and managing those resources.

1.6.1 Investment decisions

Investment decisions are those which determine how scarce resources in terms of funds available are committed to projects, which can range from acquisition of plant to the acquisition of another entity. Investing in non-current assets usually carries the need for supporting investment in working capital, for example inventories and receivables, less payables, an aspect often not properly taken into account by management. Investment to enhance internal growth is often called ‘internal investment’ as compared with acquisitions, which represent ‘external investment’.

The other side of the investment coin is disinvestment, which means the preparedness to withdraw from unsuccessful projects, and the disposal of parts of an entity which no longer fit with the parent entity’s strategy. Such decisions usually involve one very special element – the right timing for the action to be taken.

Disinvestment decisions can also be involved in reconstructions, where an entity has to alter its capital structure, possibly to survive as a result of heavy losses.

1.6.2 Financing decisions

Financing decisions relate to acquiring the optimum finance to meet financial objectives and seeing that non-current assets and working capital are effectively managed. The financial manager must possess a good knowledge of the sources of available funds and their respective costs, and should ensure that the entity has a sound capital structure, that is, a proper balance between equity capital and borrowings. Such managers also need to have a very clear understanding of the difference between profit and cash flow, bearing in mind that profit is of little avail unless the entity is adequately supported by cash to pay for assets and sustain the working capital cycle. Financing decisions also call for a good knowledge of evaluation of risk: excessive borrowing carries high risk for an entity’s equity because of the priority rights of the lenders. A major area for risk-related decisions is in overseas trading, where an entity is vulnerable to currency fluctuations, and the manager must be well aware of the various protective procedures – such as hedging – which are available.

Hedge: Transaction to reduce or eliminate an exposure to risk. (CIMA Official Terminology, 2005)
**Benefits of matching characteristics of investment and financing**

The matching approach to financing is where the maturity structure of the entity’s financing matches the cash flows generated by the assets employed.

This would have the advantage that long-term finance is used fund both non-current assets and permanent current assets, while fluctuating current assets are funded by short-term borrowings.

**The opportunity cost of finance**

In making financial decisions, the manager must always be aware of the opportunity cost aspect involved. Thus, if an entity wishes to raise money by means of an issue of ordinary shares, the terms must be made attractive enough to make it worthwhile for the investor to forego the opportunity cost of investing in the next best investment project. Also if an entity wishes to maintain or improve its share price, it must pay satisfactory dividends and show good long-term growth prospects, otherwise it will lose out because its investors will find it more satisfactory to sell out and not forego the opportunity cost of alternative equities.

In setting a price for anything – whether it be for an entity’s product or services, or the rate of interest to be paid for borrowings or to receive on loans, or the cost of equity capital – it is important to be fully aware of what the market requires and what the market will bear.

**1.6.3 Dividend decisions**

Dividend decisions relate to the determination of how much and how frequently cash can be paid out of the profits of an entity as income for its proprietors. The owner of any profit-making entity looks for reward for his or her investment in two ways: the growth of the capital invested and the cash paid out as income. For a sole trader this income would be termed drawings and for a limited liability entity the term is dividends.

The dividend decision thus has two elements: the amount to be paid out and the amount to be retained to support the growth of the entity, the latter being also a financing decision; the level and regular growth of dividends represent a significant factor in determining a profit-making entity’s market value, that is, the value placed on its shares by the stock market.

The three types of decision are interrelated, the first two pertaining to any kind of entity, while the third relates only to profit-making entities. Thus it can be seen that financial management is of vital importance at every level of business activity, from the sole trader to the largest multinational corporation. It is instructive to think this point through by taking the case of the sole trader. He (she) has to invest capital in a shop, fittings and equipment and in the purchase of inventory and sustaining receivables; he has to have sources of capital to finance his investment such as his own capital and bank borrowings; and he has to make dividend decisions to determine how much can be reasonably withdrawn from the business to ensure that it will remain sufficiently liquid and, if desired, capable of growth.

**1.7 Formulation of dividend policy and dividend decisions**

Dividend policy is one of an entity’s financing decisions. How should an entity divide its earnings between payments to shareholders and retention for future investments if the aim is to increase its market value?
Using internally generated funds is often thought to be a ‘free’ form of finance. This is of course not the case, and it is important to remember that these funds do have a cost, that is, an opportunity cost, normally taken as the cost of equity.

In deciding an entity’s dividend policy the following factors should be considered:

- **Liquidity.** In order to pay dividends, an entity will require access to cash. Even very profitable entities might sometimes have difficulty paying dividends if resources are tied up in other forms of assets, especially if bank overdraft facilities are not available.
- **Repayment of borrowings.** Dividend payout may be made difficult if borrowings are scheduled for repayment and this is not financed by a further issue of funds.
- **Restrictive covenants.** The Articles of Association may contain agreed restrictions on dividends. In addition, some forms of borrowing may have restrictive covenants limiting the amount of dividend payments or the rate of growth which applies to them.
- **Rate of expansion.** The funds may be needed to avoid overtrading.
- **Stability of profits.** Other things being equal, an entity with stable profits is more likely to be able to pay out a higher percentage of earnings than an entity with fluctuating profits.
- **Control.** The use of internally generated funds to finance new projects preserves the entity’s ownership and control. This can be advantageous in entities where the present disposition of shareholdings is of importance.
- **Policy of competitors.** Dividend policies of competitors may influence corporate dividend policy. It may be difficult, for example to reduce a dividend for the sake of further investment, when competitors follow a policy of higher distributions.
- **Signalling effect.** This is the information content of dividends. Dividends are seen as signals from the entity to the financial markets and shareholders. Investors perceive dividend announcements as signals of future prospects for the entity. This aspect of dividend policy is assuming increasing importance, and there have been numerous instances reported in the press where entities have paid an increased dividend when financial prudence suggests that they should be paying no dividend at all.

Having taken into account the above factors, entities will formulate standard dividend policies, three of which are discussed below.

### 1.7.1 Practical dividend policies

#### Constant payout ratio

There are important links between dividends and profits. In United Kingdom company law, for instance, the prohibition of paying dividends other than out of profits is seen as an important protection for creditors (including lenders, who may well specify a maximum proportion of profits which can be declared as dividends while their loans remain in force). This is reinforced by the accounting concept which defines profit as what you could afford to distribute, and still be as well off as you were. Such links encourage an approach to dividend policy, based on historic trends with some boards of directors publishing an objective to maintain a certain dividend cover, that is, *to declare dividends which represent a constant percentage of profits after tax*.

In a stable state, one would expect some symmetry in the figures, for example an entity whose profits after tax represented a 10% per annum return might choose to plough half back into the business, and look forward to a 5% per annum growth in its profits (and earnings per share) and hence dividends. This forms the basis of the idea that the value of a profit-making entity is a multiple of its past profits. The reality, however, is not one of a stable state.

One very specific shock to the system has been the instability of the unit of measure (money). Should dividends be related to the profits calculated under the historical cost
convention, or after making an adjustment to exclude the inflationary element? Ought they to be based on the underlying profit of the entity after adjusting for the gains or losses on the revaluation of financial instruments that are included within profit under IAS 39? Bear in mind that ‘well-offness’ is measured by reference to the cost of unconsumed tangible assets. No allowance is made for the intangible assets (such as quality, reputation and pace of innovation) which are so crucial to survival in a rapidly changing environment. Intriguingly, what the accountant calls an asset, for example, an old-fashioned piece of plant, can actually be a strategic liability.

**Stable policy – signalling**

Some boards of directors think not in terms of maintaining dividend cover, but in terms of maintaining a trend in the absolute level of payout. Their starting point for deciding this year’s dividend is what was paid last year, what rate of increase it represented on the previous year, and whether they feel that this rate can be repeated, taking into account considerations of liquidity. Rightly or wrongly, the dividend decision is seen as a powerful signal to the market of the directors’ confidence in the future of the entity, and this does appear to be supported by evidence that unexpected dividend cuts have been followed by a reduction in share prices. The danger, of course, is that this can become a game, in which directors seek to give the signal they think will have the most favourable effect on the share price. Some even argue that the aim must not be to surprise the market, which leads to the suggestion that the dividend should be what the analysts are predicting.

In pure economic terms, entities should pay zero dividends when they have sufficient positive net present value projects to utilise all their after tax profits and pay out 100% of after tax profits when they have no such investment possibilities. Whatever the theoretical rationale, boards would not normally countenance such potentially huge variation in dividends payouts that such a policy would imply.

In the United Kingdom, the practice of maintaining a particular rate (sometimes real, sometimes nominal) of growth of dividends has been very popular, and seemed to work well as long as things were stable, cyclical or at least predictable. As the rate of change has speeded up, however, its limitations have become more obvious and more serious. In particular, the unexpectedly severe downturn in the United Kingdom in the early 1990s presented boards with a dilemma: given sharply reduced profits, what should be preserved – dividend growth or dividend cover?

Some fund managers made it clear that they preferred dividends to retentions. Some boards responded, to the point of declaring dividends in excess of their profits after tax. One chairman talked about the need to ‘reward shareholders for their loyalty’. As a general rule, however, financial journalists took the opposite view, based on their perception of dividends as just another outlay, like wages or advertising or plant and machinery. Entities in financial difficulties, they argued, should cut dividends and increase investment. Such comments give the impression that their authors mistakenly see financial management as being about trade-offs within one time-frame (i.e. the short term). The reality is that it is about trade-offs between different time-frames.

**Residual dividend policy**

The residual approach to dividends argues that if an entity has opportunities to invest for a return in excess of the cost of capital, it should retain funds within the entity. If, on the other hand, it has funds in excess of its identifiable viable investment opportunities, it should return them to its shareholders for investment elsewhere. This would mean much more volatile levels of dividend, of course, but that was what equity capital was originally meant to be about.
1.7.2 Theory of dividend irrelevance

To appreciate the theory advanced by Modigliani and Miller (MM) in 1961 regarding dividend policy and the hypothesis of dividend irrelevance, we need to understand MM’s fundamental principle of valuation: ‘that the price of each share must be such that the rate of return (dividends plus capital gains per dollar invested) on every share will be the same throughout the market over any given interval of time.’

This principle is supported by three basic assumptions:

1. In ‘perfect’ capital markets no buyer, seller or issuer of securities is large enough for their transactions to significantly affect the current ruling price. Information regarding the ruling price is available to all without cost, and no brokerage fees, transfer taxes or other transaction costs are incurred in the trading of securities. In addition, no tax differentials exist either between dividends or retentions of profit or between dividends and capital gains.

2. All investors will behave ‘rationally’ in that they will prefer more wealth to less, and they are indifferent as to whether any given increment of their wealth is in the form of cash payments (dividends) or an increase in the market value of their holdings (capital gains).

3. ‘Perfect certainty’ carries the implication of complete assurance on the part of every investor as to the future investment programme and future profits of every company. With this assurance there is, among other things, no need to distinguish between equity and bonds as sources of funds for this analysis, which is itself based on an analytical framework set up to examine the effects of differences in dividend policy on the current price of shares in an ideal economy, characterised by the three assumptions of perfect capital markets, rational behaviour and perfect certainty.

Important aspects of this theory arising from the above assumptions, or developed from them, include the following:

- In a tax-free world, shareholders will not differentiate between dividends or capital gains, the value of an entity and therefore the price of its shares being based only on the earnings capacity of its assets and investments, that is on the worth of the projects in which the entity has invested its funds.
- The so-called ‘clientele effect’ shows that an entity with a particular pattern and stability of dividend profile will attract shareholders having a similar preference for that type of profile. Thus, since shareholders’ expectations are being met, the price of shares will be unaffected by changes in dividend policy.
- If retentions are insufficient to allow an entity to take up all its worthwhile investments, the shortfall caused by a dividend can be offset by obtaining further funds from other external sources. Modigliani and Miller argue that although there will be a loss in value of existing shares as a result of using external finance instead of retentions, such loss will be exactly offset by the amount of the dividend paid; as a result, an entity should be indifferent as to whether it pays a dividend and obtains external funding or retains more of its profits. Thus, the effect of dividends on share price is exactly compensated for by other sources of financing.
- Modigliani and Miller recognise that dividends can in some way affect share prices, but suggest that the positive effects of dividend increases on such prices relate not to the dividend itself but to the ‘informational content’ of dividends in regard to future earnings. This information leads to shareholders pushing up the share price on the basis of their expectations as to future earnings.
From these arguments it seems reasonable to assume that if an entity does not have sufficient worthwhile projects to use up retentions, it should distribute these surplus funds to its shareholders, who will then be able to invest in other entities which do have satisfactory investments to which these extra funds can be applied.

Within the considerable limitations of the assumptions made, which are discussed below, MM do present some interesting, if contentious, arguments as to why dividends are irrelevant to the value of any particular entity.

Has MM’s theory any practical relevance today? Arguably we can answer positively in that:

- it sets out a number of issues which provide useful background in developing an approach to dividend policy, for example concerning ‘informational content’ of dividends;
- since legalisation of share buy-backs in the United Kingdom, a number of entities have shown interest in, and a number have acted upon, the concept of returning surplus funds to shareholders, signifying that this may prove to be the better way of ensuring their more profitable use.

In a perfect world, which in the interests of clarity MM explicitly assumed, their theory would seem unexceptional. In the real world, however, we need to recognise some imperfections:

- **Use of the accounting model for purposes beyond its design specification.** As mentioned above, retention of profits is likely to result in the entity reporting earnings per share growth. Paying dividends and raising capital would not. If that earnings per share figure is seen as a measure of performance, or is used for determining rewards, this could have considerable significance.
- **Transaction costs.** It costs money to pay a dividend, and it costs money to raise capital. To eliminate one transaction by reducing the size of the other would clearly avoid wasteful administration costs.
- **Taxation is never neutral,** and the declaration of a dividend can affect the attribution of value as between shareholders and the tax-gatherers. Whether entities need be concerned about the tax ultimately borne by their shareholders – in respect of dividends and/or the buying and selling of shares – is a moot point. Some are adopting policies which appeal to a particular clientele, that is, category of investor; others are passively watching the steady decline of the individual shareholder, and the growth of the tax-exempt fund.
- **The inefficiency of the market.** A dividend is certain, being tangible cash-in-hand and discretionary income, whereas the market price is subject to all sorts of extraneous influences and therefore more uncertain. Note, accordingly, how increasing the dividend is a predictable response to a threat of a takeover, the presumption being that it will have the effect of increasing the share price.
- **Supporters of the efficient market hypothesis would like to think that prices equate with the net present value of projected cash flows** and are therefore fair as between buyers and sellers, but it would be perverse to argue that directors have a responsibility for the bargains struck between consenting shareholders, that is for ensuring that reality fits the hypothesis! It would be more rational to argue that they should concentrate on creating wealth, and recognise that the question of its distribution as between stakeholders is far from being within their control.
1.7.3 Scrip dividends

Entities sometimes offer shareholders a choice between a cash dividend and additional shares worth the same, or approximately the same amount. The dividend paid in shares is referred to as a scrip dividend and is often offered when the directors feel they must pay a dividend but would prefer to retain cash funds within the entity. The presumption is that the retained funds will be invested in projects which can reasonably be expected to earn an adequate return. As with bonus or scrip issues directors rarely highlight the fact that once the reserves are capitalised in this way, they become undistributable.

To see how scrip dividends work, imagine an entity with 100m shares in issue, the directors of which decided to declare a dividend of 12p per share. In the ‘normal’ course of events this would mean a cash outflow of £12m to the shareholders.

Assuming, for the sake of illustration, that the entity’s shares had been trading at around 360p ex-div., the board might offer an alternative of one new share for every 30 held. There would be rules as to fractional entitlements, of course, but in simple terms someone who held, say, 3,000 shares could receive a dividend of £360, or 100 shares’ worth – at the contemporary share price – £360.

From the point of view of the individual shareholder:

● if he (or she) had been thinking of buying some more shares, and felt that the price was unlikely to fall below 360p in the near future, he would welcome the opportunity of obtaining some without having to pay the usual commissions, etc.
● if he had no wish to increase his holding, he could simply take the dividend as originally declared.
● if he had no firm views, he could take part dividend and part shares.

1.7.4 Share repurchases

The decline in scrip dividend offers in recent years has coincided with an increase in the number of entities returning capital to investors through share repurchase schemes, or in some cases by making a special dividend payment.

The repurchase of an entity’s shares may be carried out for a number of reasons:

● return of surplus cash to investors;
● to reduce the entity’s cost of capital;
● to enhance earnings per share in the hope of also increasing market price per share;
● to prevent, or reduce the likelihood of, unwelcome takeover bids;
● to adjust the gearing of the entity to a higher level, closer to the entity’s optimal capital structure;
● to reduce the amount of cash needed to pay future dividends.

Shares may be repurchased by:

● purchase on the open market;
● individual arrangement with institutional investors;
● a tender offer to all shareholders.

An individual arrangement with institutional investors tends to be the most popular approach as it is the quickest, most efficient means of returning surplus cash. Often therefore,
only a small group of shareholders will participate in a share repurchase, whereas all shareholders will participate in a special dividend. A further consideration in the return of surplus cash concerns the possible tax implications for investors. A share repurchase may lead to a capital gains tax liability for participating investors, while a special dividend would normally attract an income tax liability.

A share repurchase may suggest a failure of management to identify projects that will generate returns above the entity’s cost of capital. Returning capital to shareholders gives the shareholders the opportunity to generate higher returns for themselves by investing elsewhere. It can also be difficult to determine a price for the share repurchase that is fair to all parties.

1.8 The impact of internal and external constraints on financial strategy

1.8.1 Internal constraints

Two of the main internal constraints on financial strategy are funding and gearing. Traditionalists claim that capital structure can be planned and managed to maximise the value of the firm. Modigliani and Miller claim that the value of an ungeared entity cannot be more than the value of a geared entity except for the present value of the tax shield and the costs of financial distress. These issues are dealt with in Chapter 4.

The main argument in favour of gearing, that is, introducing borrowings into the capital structure is that the interest payments attract tax relief. The argument against borrowing is that it introduces financial risk into the entity. Financial managers have to formulate a policy that balances the effect of these opposing features, such as the state of the economy, government economic policy, and sources of finance and their cost cannot be ignored when determining capital structure policy.

Other internal constraints on financial strategy include:

- limited access to sources of finance;
- the need to maintain good investor relations and provide a satisfactory return on investment;
- a shortage of key skills;
- limited production capacity.

1.8.2 External constraints

Major external constraints include:

- Government influence (this is discussed in Section 1.9).
- Regulatory bodies (Regulation is discussed in Sections 1.10.2 and 1.10.3).
- Major economic influences (these are discussed in Section 1.11).
- Accounting concepts: Detailed knowledge of accounting procedures will not be examined in this volume. However, discussion may be required on current and emerging issues in financial reporting (relevant topics are discussed in Section 1.13).
- Sources of finance and their cost when determining capital structure policy (these are discussed in Chapters 3 and 4).
1.9 Government influence

Governments often play a large part in influencing business activity. Some examples of the way in which governments can have an influence are as follows:

- **Employment policy.** Governments play a major role in attempting to stimulate employment. They can do this by funding vocational training programmes and funding employment programmes.
- **Regional policy.** Governments may make funds available to support regions of high unemployment and social deprivation.
- **Inflation policy.** Governments may use interest rates to control inflation. Increasing interest rates makes it more expensive for profit-making entities to borrow. It also makes borrowing more expensive for consumers, who then have less to spend. This will help to push prices down.
- **Taxation policy.** The government raises taxes on the profits generated by profit-making entities and on shareholders’ dividends.
- **International policy.** Governments can promote trade, encourage experts or discourage imports.
- **Legislation.** Laws set out how people can and should behave towards one another, and particularly, how business should be conducted.

1.9.1 Market failure

There is a case for government intervention in markets where some form of market failure is taking place. Market failure exists when markets do not bring about economic efficiency. There are a number of examples of potential market failure:

- **Public goods.** These are items which are not possible to be enjoyed by one person without them being available for others to enjoy. The consumption of public goods by one person will not prevent others from enjoying it. Examples include police services and street lighting. The private sector is unlikely to be able and willing to provide public goods. Governments intervene to provide them, financed through taxation.
- **Merit goods.** These are goods and services that the government feels would be under consumed if they were not subsidised or provided free at the point of entry. Examples include health services and education.
- **Monopoly.** The existence of monopoly power creates the potential for market failure. Prices tend to be higher and output lower where monopoly power exists. This causes a net economic welfare loss of both consumer and producer surplus. Government intervention may include taxation of monopoly profits.
- **Externalities.** The main problem of external costs and benefits is that it is difficult to clearly define property rights. Market failure may exist if producers and consumers cannot be held to account. Governments may intervene by, for example, pollution taxes.
- **Inequality.** Large differences in income and wealth between different groups within the economy leads to a wide gap in living standards. The government may decide to intervene to reduce inequality through changes to the tax and benefits system, and specific policies such as a minimum wage.
1.10 Developing financial strategy in the context of regulatory requirements

The financial manager must have a proper understanding of those aspects of legislation which impact upon entities.

Such legislation will include the Companies Acts, health and safety regulations, laws relating to consumer protection and consumer rights, laws relating to contract and agency, employment law and laws relating to protection of the environment.

You should be aware of the meaning of tax havens, which are used by large entities – usually multinational corporations – to defer payment of tax on funds earned prior to their being remitted to the parent entity’s host country or used for investment purposes. Such havens will be expected to impose only low rates of tax on income earned by resident subsidiaries or low withholding taxes on dividends remitted, to have satisfactory financial services able to provide adequate support facilities and to possess political and currency stability.

Understanding the implications of regulation on takeover and merger activities is required, although you will not need detailed knowledge of the City Code on Takeovers and Mergers.

1.10.1 Corporate governance

Corporate governance. The system by which profit-making entities are directed and controlled. The board of directors are responsible for the governance of their entities. The shareholders’ role in governance is to appoint the directors and the auditors, and to satisfy themselves that an appropriate governance structure is in place. The responsibilities of the board include setting the entity’s strategic aims, providing the leadership to put them into effect, supervising the management of the entity, and reporting to shareholders on their stewardship. The board’s actions are subject to laws, regulations and the shareholders in general meeting. (CIMA Official Terminology, 2005)

Statutory control of corporate governance has been with us for a long time, and has increased over time, but has generally lagged behind the demonstrable need for it. It is impossible to legislate against crime, for example fraud, but there is a case for spelling out the ‘rules of the game’.

The theory which underpins current UK legislation is based on the idea that a board of directors represents the interests of the shareholders, but in practice it is often dominated by executive managers. The trends towards share options and pay schemes related to high profits have opened up a risk that courses of action which are good for the directors can have an adverse effect on the long-term health of the enterprise. Among the issues of particular concern in recent years have been:

- The inability of shareholders to stop directors investing in uneconomic projects or acquisitions, funded by excessive debt, leading to high profile corporate collapse.
- The question of where the loyalty of auditors lie, and their ability to provide the assurances required by users of financial statements.
- Remuneration processes for executive managers that are less than transparent, and which appear to reward poor performance.
A number of committees have reported recommendations on corporate governance issues. These led to the London Stock Exchange issuing the Combined Code on Corporate Governance in 2003, which applies to all listed entities. Its requirements include:

- The roles of chairman and chief executive should generally be separate.
- The board should include a balance of executive and independent non-executive directors.
- No director should be involved in deciding his/her remuneration.
- The performance-related elements of remuneration should form a significant proportion of the total remuneration package of executive directors.
- The board should establish an audit committee to monitor the integrity of financial statements.
- The board should maintain a sound system of internal control.
- The board should use the Annual General Meeting to communicate to investors and encourage participation.

Detailed knowledge of corporate governance issues is not required for the Financial Strategy syllabus. Students are expected to have a general understanding of the key principles. Overseas candidates will be able to comment on regulation in their own country as an alternative to the UK examples given in this Learning System.

Many countries have developed their own codes or recommendations. In the USA for example, the 2002 Sarbanes-Oxley Act is designed to strengthen the accuracy and reliability of corporate reporting. Under the Act, entities will not be able to obtain a listing unless they have an audit committee. Auditors are prohibited from offering a variety of non-audit services to audit clients, and there are enhanced disclosure requirements.

1.10.2 Regulatory bodies

Where a market is not competitive, or is in the early stages of becoming so, there is a need for regulators whose role is to try to balance the interests of the various stakeholders. Customers need to be protected by limiting the extent to which entities can use a monopoly position to create excessively high added value for the benefit of shareholders, employees, and, through taxation, the state. Even so, the regulator still needs to ensure that prices will provide sufficient margins to allow for necessary investment.

Similar situations can exist in countries at an early stage of competition development. Here the state will often control the rate of development by licensing ‘private’ entities, while delegating to regulators a number of powers relating to business operations. Important issues for regulation are the prevention of ‘cross-subsidy’, that is the transferring or offloading of portions of overhead costs from lower- to higher-margin products, the limitation of non-price barriers affecting the entry of new competitors, and assuring reasonable quality of product in relation to price. Non-price barriers could include trade restrictions, or restricted access to supplies or distribution channels.

Regulators and their relationship to the regulated is a tricky area. Regulators rarely have statutory rights to enforce decisions and can usually only advise government. Their responsibilities may also only extend to the regulated portion of an entity’s business; if the company has interests in a deregulated area, the regulator has to take steps to ensure the correct allocation of costs.
In the United Kingdom, examples of institutions covered by this section of the syllabus are the regulators of privatised industries. Examples include Oftel (telecommunications), Ofcom (media) and Ofwat (water), plus organisations such as the Competition Commission (which is not strictly a regulator, rather a watchdog). Understanding the purpose of these organisations, and the influence they may have on government and company decisions, is necessary. Detailed knowledge of the procedures of the various organisations will not be expected in your examination.

In an international environment, financial managers need to know about issues in other countries. However, examination questions will usually allow overseas candidates to comment on institutions in their own country as an alternative to the UK examples which may be given in the question.

Exercise 1.1

Explain the objectives and main activities of a regulatory authority.

Solution

The starting point for establishing a regulatory regime is a clear set of government objectives. The regulatory rules should then be designed so that they both meet government objectives and can readily be understood by both regulator and the regulated industry.

These objectives may be classified under three headings:

1. the protection of customers from monopoly power;
2. the promotion of social and macroeconomic objectives;
3. the promotion of competition.

Where participants in a regulated market are judged to possess significant market power, and where there is no other protection for customers, methods for protecting customers in a specific sector by controls on prices and on quality of service will need to be considered. A particular focus here will be on price or tariff controls.

Social objectives cover a variety of possible government objectives, including the availability and affordability of services in particular areas and to particular groups such as the disabled, or customers in rural areas. It is often difficult to achieve these objectives (which may be specific) from wider government macroeconomic objectives. These can include policy on employment, pricing (and inflation) and investment, and may be particularly important in developing countries.

The first step in designing effective regulations to promote competition is to identify where potential barriers to entry might exist, and their relative importance. Once the market segments in which there is scope for competition have been identified, steps will be needed to assist its development.

Other regulatory options may also be considered, including:

- **Prohibiting cross-subsidy.** To enforce this it will be necessary to require the entity to make available to the regulator separate accounts for separate businesses.
● **Removal of the right to compete in defined activities.** An alternative to requiring separation or prohibiting cross-subsidy is to prohibit the regulated entity from competing in the activity in which competition is to be promoted.

● **Creation of a regulation prohibiting discrimination.** The established entity can prevent the loss of its most valuable customers to a new competitor by offering special terms of service. A rule to prevent this may therefore be appropriate.

● Regulation may be enforced by a number of means: legislation, licences, industry codes of practice, government department versus independent regulator.

The need for these, and the effectiveness of current controls, will depend very much on the technical characteristics of the particular service offered.

### 1.10.3 The implications of regulation for business combinations

The syllabus does not require detailed knowledge of the regulation of takeovers or the operations of the competition authorities in any specific country. However, some understanding of the implications of regulation is useful, as often entities use a reference to the competition authorities as a defence against takeover. In the United Kingdom takeovers are regulated in three ways, two of them formal and the third informal.

Any UK mergers which do not fall under the EC Merger Regulation (ECMR), and which meet the jurisdictional tests in the Enterprise Act 2002, fall to the UK authorities: Office of Fair Trading (OFT), Competition Commission (CC) and, in the case of public interest considerations and, for the time being, mergers between water and sewerage entities BERR’s Secretary of State.

The public interest considerations relate to national security and media mergers. The latter covers newspapers, broadcasting and cross-media mergers.

Generally, mergers can only be considered by the UK competition authorities if the turnover in the UK of the entity being taken over exceeds £70 m, or the merger creates or increases a 25% share in a market for goods or services in the UK or a substantial part of it. There is no general requirement to notify mergers to the UK competition authorities.

**Investigation by the OFT**

The OFT investigates all mergers in the first instance and, with the exception of public interest cases, decides whether or not they should be referred to the CC for further investigation. The test is whether the OFT believes a merger has resulted or may be expected to result in a substantial lessening of competition.

At this stage there are three ways in which a merger may be treated:

- it may be referred to the CC for further investigation;
- it may be cleared;
- or undertakings may be sought in lieu of a reference to the CC.

**Investigation by the CC**

Where a merger is referred to the CC, they are required to determine whether it has resulted or may be expected to result in a substantial lessening of competition and to take the action it considers reasonable and practicable to address any adverse effects of the merger that they have identified.
All CC reports are published. Entities can also obtain confidential guidance or informal advice from the OFT on whether or not a potential merger would be likely to be referred.

**Mergers with a public interest element**
For public interest cases, BERR’s Secretary of State (SoS) will decide whether to clear a merger, refer it to the Competition Commission (CC), or seek undertakings in lieu of a reference following receipt of advice from the OFT and, in the case of media mergers, from OFCOM.

The SoS will also decide whether to make an adverse public interest finding following receipt of the CC’s report. In making these decisions, the SoS must accept the views of OFT and CC as to jurisdiction and whether there is an anti-competitive outcome.

Copies of the OFT and OFCOM advice in public interest cases, together with the original intervention notices from the SoS asking OFT to investigate in particular cases, are published.

For a merger situation raising defined public interest issues, but which falls below the turnover and share of supply tests, the SoS may issue a special intervention notice allowing the competition authorities to consider those issues. As with other public interest cases, the SoS will make any decision on reference to the CC and on an adverse public interest finding.

**Mergers between water and sewerage companies**
A special regime exists for mergers between water and sewerage entities. These are considered under sections 32–35 of the Water Industry Act 1991, as amended (from 29 December 2004) by the Enterprise Act and the Water Act.

**European Community Merger Regulation (ECMR)**
Large mergers with a European dimension may be covered by the European Community Merger Regulation (ECMR) – Council Regulation No. 139/2004.

Broadly speaking mergers involving entities with an aggregate world-wide turnover of more than Euro 5bn and where the aggregate Community-wide turnover of each of at least two of the entities concerned is more than Euro 250m will be investigated by the European Commission taking into account the views of Member States.

However, mergers where more than two-thirds of the Community-wide turnover of each entity concerned is in the same Member State, are not caught by the EC Merger Regulation.

There is also a supplementary set of thresholds designed to catch mergers which would otherwise fall to multiple jurisdiction and a system of both pre- and post-notification referral to and from the Commission and Member States.

The Office of Fair Trading is responsible for UK input to the European Commission on cases being considered under the EC Merger Regulation.

Information on individual cases under the ECMR can be found on the Commission’s website.

**Public Interest Cases under the EC Merger Regulation**
The Secretary of State may also intervene on public interest grounds in mergers being considered under the EC Merger Regulation, where the public interest in question is recognised in the EC Merger Regulation. In such cases the European Commission will continue to consider the competition issues whilst the UK authorities consider public interest aspects.

*Source:* Department for Business Enterprise and Regulatory Reform (BERR) (www.berr.gov.uk)
The third control on takeovers is operated by the Panel on Takeovers and Mergers, formed in 1968 to counter the perceived inadequacy of the statutory mechanisms for regulating the conduct of both parties in the takeover process. The Panel consists of representatives from City and other leading business institutions, such as the CBI, the Stock Exchange and the ICAEW accounting body, thus representing the main associations whose members are involved in takeovers, whether as advisers, shareholders or regulators. The Panel promulgates and administers the City Code on Takeovers and Mergers, a set of rules with no force of law, but which reflects what those most closely involved with takeovers regard as best practice. It does, however, have some sanctions to enforce its authority, such as public reprimands, which damage the reputation of violators of the Code, perhaps leading to the collapse of the bid and, for financial advisers, to long-term loss of business. The Panel’s ultimate sanction is to request its members to withdraw the facilities of the City from offenders, although this is extremely rare.

1.11 Major economic influences

In this section we review some of the major economic forces affecting an organisation’s financial plans, such as interest rates, inflation and exchange rates.

1.11.1 Interest rates

A rate of interest is the price of money which is lent/borrowed. It is expressed as a percentage of the sum, calculated on an annual basis. For example if someone buys a government bond, and thus lends money to the government, they will receive interest. In this case it is calculated on the purchase price. Thus there is an inverse relationship between the price of government bonds and the rate of interest.

Let us assume that a £100 bond pays £10 annually to the holder as interest. If someone bought the bond and held it until maturity, after (say) a year they are effectively receiving 10% interest. However, if the £100 nominal value bond is bought for less than its face value at, say, £97, the purchaser is really receiving 10.31%, that is, £10 on an outlay of £97.

Furthermore, if the government needs to sell more bonds in order to finance its public-sector borrowing requirement, the price might fall to £95. However, this effectively means that a higher rate of interest is paid by the borrower (and received by the buyer). It is 10.52%, that is (£10 ÷ £95).

Generally, the longer the time period of a loan, the higher the rate of interest given/charged because of the greater risk and uncertainty involved. However, because some borrowers are safer than others, two loans for the same length of time might carry different interest rates. For example normally a bank loan to a low-risk, blue-chip entity listed on a stock exchange would receive a lower rate of interest than a loan to a high-risk sole trader.

A central rate of interest

It is clear that there is no such thing as the rate of interest because there are many rates of interest, which reflect varying risk. However, there is usually a central rate around which the others vary and to which governments have paid great attention. In the United Kingdom this has usually been the rate at which the Bank of England would lend to the money market, based on Treasury bill rates.
In the post-war period until 1971 this key central rate was called bank rate and was fixed by the Bank of England. It was replaced by minimum lending rate which was set at $1\%$ above the weekly Treasury bill lender rate, so that it reflected market conditions. However, in 1981 this rate was abolished and so there is no ‘official rate’.

1.11.2 Term structure of interest rates

One of the primary considerations in evaluating the use of borrowings is the likely movement in interest rates. This will affect the relative costs of long- and short-term borrowings, as well as increasing or decreasing the preference for fixed interest rates. In practice, long-term rates will normally be higher than short-term rates, owing to the additional risk borne by the lender. Hence an interest premium is required to attract investors to longer-term securities.

This effect may be magnified or reversed by investors’ expectations of future rates, an anticipated rate rise producing higher longer-term rates. This difference between long- and short-term rates is known as term structure. The term structure of interest rates is shown by the yield curve.

Figure 1.1 shows an upward-sloping, or normal, yield curve showing long-term rates to be higher than those available in the short term. The yield curve will normally be upward-sloping in order to compensate investors for tying up their money for longer periods of time. In extreme cases, this may justify an entity, using short-dated borrowings which is replaced regularly – although the level of transaction costs makes this unlikely.

Sometimes the yield curve will be downward, or inverse, with short-term interest rates higher than long-term rates, as shown in Figure 1.2. In the UK, the Bank of England Monetary Policy Committee meets monthly to set interest rates. Their influence is directed primarily towards short-term interest rates, as a means of managing inflation in the economy. Short-term interest rates might be increased to combat inflation. If, however, interest rates are expected to fall in the future once the risk of inflation has been countered, long-term interest rates may be lower than short-term rates, and the yield curve would therefore be downward sloping.

Factors that influence term structure

In general terms, an increasing term structure results from two factors:

- increased risk of longer dated borrowings;
- anticipated general interest-rate rises.
More detailed analysis is required, however. Below are listed formal theories as to why interest rates increase with time.

**Expectations theory** – This states that the forward interest rate is due solely to expectations of interest-rate movements.

If an individual wishes to borrow for 2 years, 2 obvious possibilities present themselves:

(a) borrow for 2 years at an agreed rate;
(b) borrow for 1 year and refinance for the second year (i.e. pay off the first loan by taking out a second).

In option (a), the interest paid on the loan will be based on the current interest rate and the forward rate for 1 year.

In option (b), the individual will consider the current interest rate and the expected interest rate for year 2.

Thus, the choice between the options hinges on whether the forward rate for year 2 is higher or lower than the expected rate.

From the lender’s point of view, if the expected rate was higher they would only lend short, preferring to renegotiate at the end of 1 year and take advantage of the anticipated rate rise. A similar argument could be made if the expected rate was lower than the forward rate. Thus, for long- and short-dated borrowings to coexist, expected future rates and forward rates must be equal. Thus, the term structure of interest rates arises purely from investor expectations.

**Liquidity preference theory** – The problem with the expectations theory is that it ignores risk. If the expected rate for year two is the same as the forward rate, then an individual needing to borrow for 2 years would choose a 2-year loan since this eliminates the uncertainty of the actual interest rate to be paid in year two. Thus, borrowers will aim to borrow for the period for which they need funds. If lenders wish to lend for only 1 year there will be a shortage of long funds and an excess of short funds. This will lead to a premium on forward rates – that is, lenders will get a bonus for lending for 2 years and borrowers will have to pay extra if they insist on a 2-year loan.

In this case the term structure of interest rates would again be upward-sloping but now this would be because of the liquidity preference of lenders and borrowers.

**Market segmentation** – It has been argued that demand for capital funds in practice can be segmented, particularly on a time basis. Thus, for example, entities tend to finance inventories with short-term funds and equipment with long-term funds. This leads to different
factors affecting long- and short-term rates and a lack of a clear trend in the yield curve, characterised by irregularities such as humps and dips.

*Real interest rates* – The real interest rate puts interest rates in the context of inflation. When the rate of interest is higher than the rate of inflation, there is a positive real rate. This means that borrowers are losing in real terms but savers are gaining. Conversely, when the rate of inflation is higher than the rate of interest, the real rate of interest will be negative. In such a case borrowers gain and savers lose.

The relationship between real and nominal rates of interest is given by the formula originally considered by Fisher:

\[
(1 + \text{nominal rate}) = (1 + \text{real rate}) \times (1 + \text{inflation rate})
\]

If the nominal rate of interest is 7% and the rate of inflation is 2%, the real rate of interest is calculated as:

\[
1 + \text{real rate} = \frac{1 + \text{nominal rate}}{1 + \text{inflation rate}} = \frac{1.07}{1.02} = 1.049
\]

Thus, the real rate is 4.9%.

**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:

- **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. If we take incomes as fairly stable in the short term, higher interest payments on credit cards/mortgages, etc., leave less income for spending on consumer goods and services. This fall in spending means less aggregate demand in the economy and thus unemployment results.

- **Asset values fall** – the market value of financial assets will drop, because of the inverse relationship (between bonds and the rate of interest) explained earlier. This, in turn, will reduce many people’s wealth. It is likely that they will react to maintain the value of their total wealth and so may save, thereby further reducing expenditure in the economy. This phenomenon seems to fit the UK recession of the early 1990s when the house-price slump deepened the economic gloom. For many consumers today a house, rather than bonds, is their main asset.

- **Foreign funds are attracted into the country** – a rise in interest rates will encourage overseas financial speculators to deposit money in the country’s banking institutions because the rate of return has increased relative to that in other countries. Such funds could be made available as loans to firms in that country by the banking sector.

- **The exchange rate rises** – the inflow of foreign funds raises demand for the domestic currency and so pushes up the exchange rate. This has the benefit of lowering import prices and thereby bearing down on domestic inflation. However, it makes exports more expensive and possibly harder to sell. The longer-term effect on the balance of payments could be beneficial or harmful depending on the elasticity of demand and supply for traded goods.

- **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.
This could be achieved by squeezing profit margins and/or wage levels. Second, new borrowing is deferred by the high interest rates and so demand will fall. Third, the higher exchange rate will raise export prices and thereby threaten sales which in turn pressurises producers to cut costs, particularly wages. If workers are laid off then again total demand is reduced and inflation is likely to fall.

1.11.3 Inflation

Inflation is defined simply as ‘rising prices’ and shows the cost of living in general terms.

The effects of inflation

If the rate of inflation is low, then the effects may be beneficial to an economy. Businessmen are encouraged by fairly stable prices and the prospect of higher profits. However, there is some argument about whether getting inflation below 3% to, say, zero, is worth the economic pain (of, say, higher unemployment). There is agreement, though, that inflation above 5% is harmful – worse still if it is accelerating. The main arguments are that such inflation:

- **Distorts consumer behaviour** – people may bring forward purchases because they fear higher prices later. This can cause hoarding and so destabilise markets, creating unnecessary shortages.
- **Redistributes income** – people on fixed incomes or those lacking bargaining power will become relatively worse off, as their purchasing power falls. This is unfair.
- **Affects wage bargainers** – trades unionists on behalf of labour may submit higher claims at times of high inflation, particularly if previously they had underestimated the future rise in prices. If employers accept such claims this may precipitate a wage–price spiral which exacerbates the inflation problem.
- **Undermines business confidence** – wide fluctuations in the inflation rate make it difficult for entrepreneurs to predict the economic future and accurately calculate prices and investment returns. This uncertainty handicaps planning and production.
- **Weakens the country’s competitive position** – if inflation in a country exceeds that in a competitor country, then it makes exports less attractive (assuming unchanged exchange rates) and imports more competitive. This could mean fewer sales of that country’s goods at home and abroad and thus a bigger trade deficit. For example the decline of Britain’s manufacturing industry can be partly attributed to the growth of cheap imports when they were experiencing high inflation in the period 1978–1983.
- **Redistributes wealth** – if the rate of interest is below the rate of inflation, then borrowers are gaining at the expense of lenders. The real value of savings is being eroded. 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.

1.11.4 Exchange rates

The exchange rate of a currency is a price. It is the external value of a currency expressed in another currency, for example £1 = $1.60 (or $/£ = 1.60). A more complex measure expresses the value in terms of a weighted average of exchange rates as an index number. These are currencies of a nation’s main trading partners in manufactured goods and are collected in a representative basket. This is known as the effective exchange rate and shows the relative
importance of the country as a competitor in export markets. A fall in the index shows a
depreciation of a currency relative to the total basket of currencies on which the index is
based. However, it is possible that that currency may be appreciating against some currencies
in the basket whilst depreciating against others. A fall in the index simply shows that there
is an overall depreciation, whereas a rise in the index would show an overall appreciation.

The exchange of currencies is vital for trade in goods and services. British firms selling
abroad will require foreign buyers to exchange their currency into sterling to facilitate pay-
ment. Similarly, British importers will need to pay out in foreign currencies. Also, when
funds are transferred between people in different countries, foreign exchange is required.
Today, the sale and purchase of currencies for trading purposes is dwarfed by the lending
and borrowing of funds.

The internal and external values of a currency are different. The former refers to the
purchasing power of a currency at home. Inflation lowers the internal value. The external
value is not affected by domestic inflation directly, but it changes with variations in other
nations’ exchange rates. These variations reflected the demand for and supply of currencies
on foreign exchange markets. In turn these tend to reflect trade performance.

The foreign exchange market
This market enables entities, fund managers, banks and others to buy and sell foreign
currencies. Capital flows arising from trade, investment, loans and speculative dealing cre-
ate a large demand for foreign currency, particularly sterling, US dollars and Euros. Typical
deals are in Euros, and £300bn is traded daily in London, the world’s largest foreign
exchange centre. London benefits from its geographical location, favourable time intervals
(with United States and the Far East in particular) and the variety of business generated
there – insurance, commodities, banking, Eurobonds, etc.

Foreign exchange trading may be spot or forward. Spot transactions are undertaken almost
immediately and settled within 2 days. However, forward buying involves a future deliv-
ery date from 3 months onward. Banks and brokers, on behalf of their clients, operate in
the forward market to protect the anticipated flows of foreign currency from exchange rate
volatility. The forward price of a currency is normally higher (at a premium) or lower (at a
discount) than the spot rate. Such premiums (or discounts) reflect interest rate differentials
between currencies and expectations of currency depreciations and appreciations.

As the foreign exchange market has grown, so other instruments such as futures and
options have been developed to protect foreign exchange commitments. Currency futures
involve the trading of forward transactions, while currency options enable buyers (at a pre-
mium paid to the writer of the option, usually a bank) to guarantee a buying (or selling)
price for a currency at a future specified date.

1.12 Use of financial analysis

Interpretation and analysis of an entity’s financial statements is the process of arranging,
examining and comparing the results in order that users are equipped to make economic
decisions. The comparison of results may be within the same entity are time, or against
other entity’s within the same business sector at a particular time.

A vital step in a successful analysis of financial statements is to identify the user who
requires the analysis. We need to identify a number of users of the financial statements and
recognise that each user utilises the financial statements in a different way.
Examination questions will usually identify the type of user for whom a report is being prepared, so it is clearly of importance to recognise the differences between users and their needs.

**Present and potential investors**
Both present and potential investors are interested in information that is useful in making buy/sell/hold decisions. Will the entity be able to generate cash in the future? How risky is the investment? Does its financial performance exceed that of other potential investee entities? How much is the investment likely to yield in capital growth and/or dividend? Analysis of the financial statements can help to answer these questions. There is a range of ratios of particular interest to the investor group; these are examined in detail later in Section 2.7. In addition, return on capital employed (ROCE) and related performance and asset management ratios are likely to be of interest to this group of users.

**Lenders and potential lenders**
Lenders are principally interested in assessing whether or not the loans that they have made are likely to be repaid, and whether or not the related interest charge will be paid in full and on time. Potential lenders required analysis of financial statements in order to assist them in deciding whether or not to lend. Lender groups are likely to be particularly interested in ratios such as interest cover and gearing, and will be interested in the nature and longevity of other categories of loan to the entity. These are examined in detail in Section 4.2.

**Suppliers and other creditors**
This group is interested in information that helps them to decide whether or not to supply goods or services to an entity. Availability of cash will be of particular interest, together with such evidence as is available is general-purpose financial statements about the entity’s record in paying its creditors on time. Working capital ratios, and the operating cycle, may be appropriate calculations to undertake when analysing financial statements for the benefit of this class of user. These ratios are examined in detail in Section 2.8.

**Employees**
In large entities employees are likely to be particularly interested in one part of the entity’s operations. They may, therefore, find segmental information to be useful. More generally, they need to be able to assess the stability and performance of the entity in order to gauge how reliable it is likely to be as a source of employment in the longer term. Employees are likely to be interested in disclosures about retirement benefits and remuneration.

**Customers**
Customers may be in a vulnerable position if there are few potential suppliers in a market for goods. They may therefore be interested in assessing the risks which threaten their supplier. Potentially they may be interested in takeover opportunities in order to ensure the continuing supply of a particular raw material.

**Governments and their agencies**
The governmental group is in a position to require special-purpose reports. Tax computations would fall into this category. However, general-purpose reports may also be of use, for example in gathering statistics on particular industries.
The general public
Members of the public may have special interests in the activities of certain entities, especially where, say, an individual entity dominates the local employment market. Pressure groups and their members would also fall under the umbrella category of ‘general public’, and their needs will vary according to their special interest. Environmental issues are of increasing concern to may people, and it is likely that pressure groups will take a particular interest in firms that are perceived as polluters. Analysis of the financial statements for this type of user would tend to focus on any additional voluntary disclosures made about the entity’s environmental policies, on provisions and contingent liabilities related to environmental damage, and on capital investment (e.g. investment in new plant).

1.12.1 Understanding the business
It is often thought that financial analysis involves the direct application of a routine set of numerical calculations to a set of published accounts. This is only one part of the task. In order to interpret those calculations it is important to understand the relationships between the data and the underlying reasons, economic and other, that account for the entity’s current position.

The history of the entity underlies the current position and future outlook. Furthermore, the owners and their individual characteristics will influence factors such as the level of risk in the entity and dividend policy. Knowledge of the quality, qualifications and experience of management will assist in evaluating the performance and position of the entity.

Financial analysis requires an understanding of the products, services and operating characteristics of the entity. This will assist in understanding data such as revenue, profitability, inventories and working capital.

The entity operates within an industry consisting of entities with similar operating characteristics. If the analysis requires comparison of the entity with the industry norms, it is important to identify the key characteristics of the industry and to establish benchmarks such as gross profit ratios, receivables collection days, etc.

1.12.2 Profitability ratios

Revenue
When analyzing the performance of an entity, a useful starting point is the examination of revenue. Revenue is important in both absolute and relative terms. Increases or decreases in revenue may be attributable to changes in selling prices or sales volumes or a combination of the two factors.

Problems can arise in making a valid interpretation of movements in revenue. For example:

- Accounting policies on revenue recognition may vary between businesses. There may be inconsistencies between accounting periods, especially where the business derives some or all of its revenue from long-term contracts.
- Inflation may account for some of the increase in price.
- A detailed breakdown of revenue for the business may not be available. To some extent, IAS 14 Segment reporting stipulates revenue details for different segments of the entity.

Understanding the reasons for movements in revenue may help to explain movements in costs such as cost of sales, advertising, selling and distribution costs and telephone
charges. If revenue increases, then a similar increase in these revenue-related costs could be expected. Conversely, an increase in, say, marketing and advertising expenditure might help to explain an increase in revenue.

**Profitability**
Several profit figures are identified in a typical income statement. Each may be used to evaluate the profitability of the business.

**Gross profit margin**
The CIMA Official Terminology definition of gross profit percentage is:

\[
\pi = \frac{(Sales - cost of sales)}{Sales for the period} \times 100
\]

This ratio might be expected to be more or less constant from one year to the next within an entity. Even if there is an increase in direct costs, an efficient entity could be expected to pass on the increases in the form of increased sales prices. However, this may not be the case in practice.

The gross profit margin requires a detailed breakdown in order to gain an understanding of variations. Ideally, the analyst requires information relating to opening and closing inventories, purchases, direct wages and overheads. Further information as to the following items would be required in order to evaluate gross profit margin fully:

- breakdown by product, geographical area or other segment;
- inventory valuation policies;
- overhead allocation methods;
- purchasing details such as bulk discounts, purchasing errors, wastage or theft;
- selling prices of different products over the period.

Obviously, much of this information is not available from an entity's annual report. Some businesses do not even report gross profits.

**Operating profit margin**
The operating profit margin is trading or operating profit in relation to revenue, expressed as a percentage.

Operating profit is the profit from the trading activities of the entity; it comprises profits after operating costs, but before finance costs and tax, and before investment income. Further analysis might include measuring operating costs as a percentage of revenue, and comparing to benchmarks budgets, previous years or industry averages. For example:

\[
\pi = \frac{Administration costs}{Revenue} \times 100
\]

\[
\pi = \frac{Telephone costs}{Revenue} \times 100
\]

\[
\pi = \frac{Advertising costs}{Revenue} \times 100
\]
Net profit margin
Net profit margin expresses the relationship between net profit and sales. Net profit for this purpose would be profit after deduction of the tax charge and finance cost.

\[
\frac{\text{Net profit}}{\text{Revenue}} \times 100
\]

Where comparing net profit year on year, it is important to allow for any exceptional charges or credits. Also, it would be sensible to take into account any large adjustments in respect of under- or over-provided tax provisions.

EBITDA
EBITDA is an acronym for earnings before interest, tax, depreciation and amortization. In recent years many large entities have adopted EBITDA as a key measure of financial performance. Sceptics suggest that they do this in order to publicise a higher measure of earnings than profit from operations (this type of measurement is sometimes cynically referred to as EBB – earnings before the bad bits).

However, it does make some sense to measure EBITDA, provided that the user fully understands what is included and what is left out. Depreciation and amortization are accounting adjustments, not representing cash flows, that are determined by management. It can therefore be argued that excluding these items in assessing earnings eliminates a major area where management bias can operate. Unfortunately, EBITDA is consequently often misunderstood as being a measurement of cash flow, which of course it is not. Even though two categories of non-cash adjustment are eliminated, financial statements are prepared on an accruals basis. EBITDA makes no adjustments in respect of accruals or working capital movements, and so is emphatically not a cash flow measurement.

1.12.3 Activity ratios
A further, related, set of ratios can be calculated that indicate the efficiency of usage of the entity’s assets in producing revenue and profits.

Asset turnover

\[
\frac{\text{Revenue}}{\text{Total assets}}
\]

This calculation is usually expressed as a simple ratio, rather than as a percentage. It shows how much revenue is produced per $ of investment in total assets.

The overall ratio can be further broken down to show revenue in relation to other categories of asset. For example, a useful ratio in certain contexts is:

\[
\frac{\text{Revenue}}{\text{Non-current assets, excluding investments}}
\]

This ratio shows the productivity of non-current assets in generating sales. It should be noted that this ratio is not always useful or informative. Where an entity is using assets that are nearing the end of their useful lives, having been subject to annual depreciation charges over a relatively long period, the ratio is likely to be rather high. Similarly, where
an entity uses the historical cost convention, unmodified by revaluation, asset values are also likely to be relatively low, an effect which is more intrusive as the assets age. Also, in labour-intensive entities, where the non-current asset base is low, the ratio tends to lack significance.

Note that, where possible, the average asset figure over the year should be used in the denominator of the fraction. This is likely to give a more consistent and representative result. External users of annual reports do not have access to monthly information with which to calculate an average, but opening and closing figures often give a reasonable approximation.

**Inventory turnover**

Conventionally, inventory turnover is expressed in terms of cost of sales, rather than of revenue. If cost of sales is not available, perhaps because the entity does not have a policy of disclosing gross profit, revenue could be used. Provided it is used consistently when making comparisons, the ratio will have some information content. However, where the information is available, cost of sales is to be preferred. The inventory turnover ratio indicates the liquidity of inventories. The higher the ratio, the more quickly inventory is being sold:

\[
\text{Average inventory} \div \text{Cost of sales}
\]

Application of this formula produces a figure which shows the number of times, on average, that inventory has turned over during the year. If only a closing figure is available for inventory, then that can be used. However, the result must be treated with some caution, as the closing figure may be unrepresentative.

The ratio can be inverted to give the number of days, weeks or months that inventory, on average, has remained in the warehouse:

\[
\frac{\text{Average inventory}}{\text{Cost of sales}} \times 365 \text{ days (or 52 weeks, or 12 months)}
\]

### 1.12.4 Return on capital ratios

**Return on capital employed**

Return on capital employed (ROCE) is a measurement that is frequently used in the analysis of financial statements. This shows the overall performance of the entity, expressed as a percentage return on the total investment. It measures management’s efficiency in generating profits from the resources available.

Return on capital employed is expressed as a percentage, and is calculated as follows:

\[
\text{Profit} \div \text{Capital employed} \times 100
\]

For the purposes of the ROCE measurement, capital employed includes the following:

- Issued share capital
- + Reserves
- + Preferred shares
Return on assets

Return on assets (ROA) involves a similar calculation to ROCE, but the denominator represents total assets (i.e. the balance sheet total). Where an entity has a policy of regular revaluation of assets, both ROCE and ROA are likely to provide a better measure of economic performance.

ROA, which is expressed as a percentage, is calculated as follows:

$$\text{ROA} = \frac{\text{Operating profit}}{\text{Total assets}} \times 100$$

Return on assets: relationship with other ratios

ROA can be broken down into two component ratios that have already been introduced: operating profit margin and asset turnover ratio.

Operating profit margin $\times$ asset turnover = Return on assets

The relationship becomes clear when we put the ratio calculations into the formula:

$$\frac{\text{Operating profit}}{\text{Revenue}} \times \frac{\text{Revenue}}{\text{Assets}} = \frac{\text{Operating profit}}{\text{Assets}}$$

Return on shareholders’ funds

Sometimes it can be useful to calculate return from the shareholders’ point of view. The formula for the ratio is:

$$\text{Return on shareholders’ funds} = \frac{\text{Profits attributable to shareholders}}{\text{Shareholders’ funds}}$$

Profits attributable to shareholders comprises profits after tax, minority interest and non-equity appropriations (such as preference dividends). Shareholders’ funds comprise equity share capital and reserves.

1.12.5 Liquidity ratios

The profitability and activity ratios indicate how the entity is performing. It is important to supplement this review with an examination of the effects of the performance on the liquidity and cash position of the entity.
The bank balance
The analysis of the liquidity of an entity may commence with a review of the actual bank balance in absolute terms. Has the bank balance increased or decreased significantly? It could be that the overdraft is near to its permitted limit or that high cash resources indicate a good takeover prospect.

Short-term liquidity
The liquidity of the entity is measured by examining the relationships between current assets and current liabilities. To what extent is the entity able to meet its current liabilities as they fall due?

Two common ratios are used to answer this question: the current ratio and the quick ratio:

\[
\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}
\]

\[
\text{Quick ratio} = \frac{\text{Current assets less inventory}}{\text{Current liabilities}}
\]

The quick ratio recognises that the time taken to convert inventory into cash in many entities is significantly longer than other current assets and so gives a more conservative view of liquidity. However, it is important to select ratios suitable for the circumstances of the entity. If inventory is an insignificant amount (as it would be, for example, in most service entities), there is little point in calculating the quick ratio.

There is no standard number that should be expected in these calculations; it should depend on the industry and should be linked to other areas of the analysis. The higher the ratio, the more liquid the entity, but high liquidity can itself be a problem. It may mean that the entity is unable to utilise cash effectively by investing it profitably.

The immediate liquidity of an entity can be defined using the cash balance itself:

\[
\frac{\text{Cash}}{\text{Current liabilities}}
\]

The operating cycle
The length of the operating cycle can assist in determining the immediate effects of the balance sheet position on the bank balance.

The operating cycle comprises cash, receivables, inventory and payables.

This is covered in detail in Section 2.8. However, for now, two key ratios are:

Receivables days
The number of days it takes for the average customer to pay may be measured as follows:

\[
\frac{\text{Average receivables}}{\text{Credit sales}} \times 365 \text{ days (or 52 weeks) (or 12 months)}
\]

A retail or cash-based entity may have zero or very low receivables days.

Note that, where an entity sells for both cash and on credit, it will be necessary to split revenue into the two types.
**Payables days**

The length of time taken to settle payables may be measured as follows:

\[
\text{Average payables} \times 365 \text{ days (or 52 weeks) (or 12 months)}
\]

Current payables comprise a form of finance that is free, or almost free. However, there may be costs in terms of loss of prompt payment discount, and loss of supplier goodwill where excessive time is taken to pay. Efficiency is measured relative to industry norms, receivables days, and supplier terms.

**1.12.6 Analysis of capital structure**

The gearing ratio is an important measure of risk. It is important to analyse, particularly for users such as shareholders and creditors, the ability to satisfy debts falling due after one year. There are two elements to consider: repayment of capital and payment of interest.

The assessment of an entity’s gearing risk can be identified from two areas. The balance sheet shows the current liquidity and capital structure of the entity, that is the short-term liquidity and the level of fixed prior charge capital. The income statement shows the profitability of the entity generally, indicating its ability to generate cash, some of which may be available to repay debt.

The capital structure of the entity provides information about the relative risk that is accepted by shareholders and creditors. As long-term debt increases relative to shareholders’ funds then more risk is assumed by long-term creditors and so they would require higher rewards, thereby decreasing resources available for the shareholders. As risk increases, creditors require higher interest in order to compensate for the higher risk.

However, the use of debt by management in their capital structure can assist in increasing profits available to shareholders. Cash received into the business from lenders will be used to generate revenue and profits. As interest costs are fixed, any profits generated in excess of the interest costs will accrue to the shareholders. There is, however, a negative side to the use of debt in the business. If the cash from the debt does not raise sufficient profits then the fixed interest cost must be paid first and so profits available to shareholders are decreased, and may be extinguished completely.

**Interest Cover**

Although the use of debt may generate higher profits for shareholders there is a limit to its use. This may be gauged from the income statement by focusing on the profitability and interest repayments in the interest cover ratio:

\[
\frac{\text{Profit before interest and tax}}{\text{Interest expense}}
\]

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

**Gearing ratio**

The gearing ratio can be calculated as follows

\[
\frac{\text{Total long-term debt}}{\text{Shareholders’ funds } + \text{long term debt}} \times 100
\]
Long-term debt includes debentures, mortgages and other long-term debt, including preferred shares. Any bank overdraft would be included to the extent that it is actually a source of long-term finance. Shareholders’ funds comprises equity share capital and reserves.

**Debt ratio**

Another useful ratio is the ratio of long-term debt to total assets, which is calculated as follows:

\[
\text{Debt ratio} = \frac{\text{Total long-term debt}}{\text{Total assets}} \times 100
\]

This can provide very useful information for creditors as it measures the availability of assets in the business in relation to the total debt.

**Example 1.A**

This example will be used to illustrate the calculation of most of the accounting ratios illustrated so far in this chapter. The income statement of JQ for the year ended 31 December 20X4 and its balance sheet at that date are as follows:

**Income statement**

<table>
<thead>
<tr>
<th></th>
<th>$million</th>
<th>$million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>1,845</td>
<td></td>
</tr>
<tr>
<td>Cost of sales</td>
<td>(758)</td>
<td></td>
</tr>
<tr>
<td>Gross profit</td>
<td>1,087</td>
<td></td>
</tr>
<tr>
<td>Distribution costs</td>
<td>(136)</td>
<td></td>
</tr>
<tr>
<td>Administrative expenses</td>
<td>(61)</td>
<td></td>
</tr>
<tr>
<td>Profit from operations</td>
<td>890</td>
<td></td>
</tr>
<tr>
<td>Finance cost</td>
<td>(104)</td>
<td></td>
</tr>
<tr>
<td>Income tax expense</td>
<td>(69)</td>
<td></td>
</tr>
<tr>
<td>Net profit for the period</td>
<td>717</td>
<td></td>
</tr>
</tbody>
</table>

**Balance sheet**

<table>
<thead>
<tr>
<th></th>
<th>$million</th>
<th>$million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-current assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>4,002</td>
<td></td>
</tr>
<tr>
<td>Current assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inventories</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>Trade receivables</td>
<td>180</td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>113</td>
<td></td>
</tr>
<tr>
<td>Total assets</td>
<td>4,335</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Equity and Liabilities</th>
<th>$million</th>
<th>$million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital and reserves</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Issued capital ($ 1 shares)</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td>Accumulated profits</td>
<td>1,132</td>
<td></td>
</tr>
<tr>
<td>Total equity and liabilities</td>
<td>1,732</td>
<td></td>
</tr>
<tr>
<td>Non-current liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest-bearing borrowings</td>
<td>2,022</td>
<td></td>
</tr>
<tr>
<td>Deferred tax</td>
<td>291</td>
<td></td>
</tr>
<tr>
<td>Current liabilities</td>
<td>2,313</td>
<td></td>
</tr>
<tr>
<td>Total equity and liabilities</td>
<td>4,337</td>
<td></td>
</tr>
</tbody>
</table>
Note 1: the market price of one share of JO at 31 December 20X4 was $10.22.
Note 2: earnings per share is calculated as $717 m/600 m = 119.5¢
Note 3: all sales are made on credit.
Note 4: purchases on credit in the year were $527 m and trade payables at 31 December 20X4 was $61 m
Note 5: the dividend for the year was $400 m.

**Performance: profitability ratios**

Gross profit margin:

\[
\frac{\text{Gross profit}}{\text{Revenue}} \times 100 = \frac{1,087}{1,845} \times 100 = 58.9\%
\]

Operating profit margin:

\[
\frac{\text{Operating profit}}{\text{Revenue}} \times 100 = \frac{890}{1,845} \times 100 = 48.2\%
\]

Net profit margin

\[
\frac{\text{Net profit}}{\text{Revenue}} \times 100 = \frac{717}{1,845} \times 100 = 38.9\%
\]

**Performance: activity ratios**

Asset turnover:

\[
\frac{\text{Revenue}}{\text{Total assets}} = \frac{1,845}{4,337} = 0.42\%
\]

(This means that for every $1 invested in assets, the business has produced $0.42 in revenue)

Non-current asset turnover:

\[
\frac{\text{Revenue}}{\text{Non-current assets}} = \frac{1,845}{4,002} = 0.46
\]

Inventory turnover:

\[
\frac{\text{Cost of sales}}{\text{Average inventory}} = \frac{758}{42} = 18\text{ times}
\]

\[
\frac{\text{Average inventory}}{\text{Cost of sales}} = \frac{42}{758} \times 365 = 20.2\text{ days}
\]

(Note that in this case the opening inventory figure is not available and we cannot, therefore, calculate an average, so closing inventory has been used.)

**Performance: return on capital ratios**

Return on capital employed:

\[
\frac{\text{Profit}}{\text{Capital employed}} \times 100 = \frac{890}{4,337 \times 292^*} \times 100 = 22\%
\]

*Capital employed is calculated as issued capita + accumulated profits + interest-bearing borrowings + deferred tax provision, that is, total assets less current liabilities. If a breakdown of current liabilities were available, any bank overdraft could also be included.

Return on assets

\[
\frac{\text{Operating profit}}{\text{Total assets}} \times 100 = \frac{890}{4,337} \times 100 = 20.5\%
\]

To demonstrate the relationship with other ratios, return on assets can be broken down as follows:

Operating profit margin × Asset turnover = return on assets

From the calculations above:

\[48.2\% \times 0.42 = 20.5\%\]
Liquidity ratios: short-term liquidity

Current ratio:
\[
\frac{\text{Current assets}}{\text{Current liabilities}} = \frac{335}{292} = 1.15 : 1
\]

Quick ratio:
\[
\frac{\text{Current assets less inventory}}{\text{Current liabilities}} = \frac{335 - 42}{292} = 1.0 : 1
\]

Note that these ratios are usually expressed as shown above, that is, as a figure compared to 1.

Immediate liquidity ratio:
\[
\frac{\text{Cash}}{\text{Current liabilities}} = \frac{113}{292} = 0.37 : 1
\]

Liquidity ratios: the working capital cycle

Trade receivables days:
\[
\frac{\text{Average receivables}}{\text{Credit sales}} \times 365 = \frac{180}{1,845} \times 365 = 35.6 \text{ days}
\]

Trade payables days:
\[
\frac{\text{Average payables}}{\text{Credit purchases}} \times 365 = \frac{61}{527} \times 365 = 42.2 \text{ days}
\]

Note that, because of limited information, closing receivables and payables have been used instead of average figures.

Operating cycle:
\[
\begin{align*}
\text{Inventories days} & = 20.2 \\
+ \text{Receivables days} & = 35.6 \\
- \text{Trade payables days} & = 42.2 \\
\hline
\text{Operating cycle} & = 13.6
\end{align*}
\]

Analysis of capital structure: performance effects

Interest cover:
\[
\frac{\text{Profit before interest and tax}}{\text{Interest expense}} = \frac{890}{104} = 8.6 \text{ times}
\]

Analysis of capital structure: balance sheet gearing

Gearing ratio (debt to equity):
\[
\frac{\text{Total long-term debt}}{\text{Shareholder' funds}} \times 100 = \frac{2,022}{1,732} \times 100 = 116.7\%
\]

Debt to total assets ratio:
\[
\frac{\text{Total long-term debt}}{\text{Total assets}} \times 100 = \frac{2,022}{4,337} \times 100 = 46.6\%
\]

1.13 Modelling and forecasting cash flows and financial statements

1.13.1 Forecasting cash flows
Cash flow forecasts are vital to the management of cash. They show, over periods varying between a single day, a week, a month, a year or even longer, the expected inflows and outflows of cash through the company. They help to show cash surpluses and cash shortages.
Management can therefore use cash budgets to plan ahead to meet those eventualities; arranging borrowing when a deficit is forecast, or buying short-term investments during times of excess cash.

Remember that there will be differences between the cash flow forecast for a period and the forecast income statement for that period. This is because the cash budget is concerned with cash payments and cash receipts, while the income statement is concerned with income earned and expenses consumed in a period.

Areas where the two statements may show different amounts include:

- the cash budget will record budgeted cash receipts from customers, while the income statement will show forecast revenue for the period;
- the cash budget will record budgeted cash payments to suppliers, while the income statement will show forecast cost of sales, which will reflect opening inventory, plus purchases, less closing inventory;
- the cash budget shows the budgeted cash payments for expenses such as wages, electricity and rates. The income statement will record the expenditure expected to be consumed in the period, reflecting any accounts or prepayments;
- the cash budget will reflect the cost of purchasing a non-current asset at the expected date of purchase and the proceeds at the date of sale. The income statement will record a depreciation charge for the consumption of the asset and a profit or loss on disposal.

1.13.2 Forecasting financial statements

Forecasting financial statements can be constructed for a period several years from a base year, but will require a number of assumptions to be made. Here we consider the three main financial statements and provide guidance for forecasting each of them.

**Forecast income statements**

Forecasting an income statement calls for some estimate to be made of the future amount of each item in the entity’s income statement. Remember that cash flows are not the same as income. The key issues are likely to be as follows:

- **Revenue** – usually assumed to be a percentage change on the previous year.
- **Cost of sales** – usually assumed to be a percentage change on the previous year.
- **Gross profit** – revenue minus cost of sales.
- **Operating expenses** – usually assumed to be a percentage change on the previous year. However, deal with depreciation separately if information is available.
- **Depreciation** – remember the depreciation charge for the year will need to reflect assets purchased or disposed of in the year.
- **Interest payable** – the amount of interest payable will change if new loans are taken out in the year, or if existing loans are redeemed in the year.
- **Taxation** – taxation payable is based on the taxable profit for the year rather than the accounting profit. To arrive at the taxable profit it will be necessary to add depreciation back to the accounting profit before tax and deduct tax allowable depreciation. Other adjustments may be required as specified in a question.
- **Dividends** – usually assumed to be a percentage change on the previous year. However, it may also be assumed that the dividend payout ratio (dividend/profit after tax) will be maintained.

**Forecast balance sheet**

Forecasting a balance sheet calls for some estimate to be made of the future amount of each item in the entity’s balance sheet. Usually the cash balance or bank overdraft may be
used as the balancing figure, although this can usually be reconciled with sufficient time. The key issues are likely to be as follows:

- **Intangible assets** – consider any additions or write-downs to their existing balance sheet value.
- **Tangible non-current assets** – the balance sheet values will need to be adjusted for any purchases or disposals in the year. The carrying value will also need to be adjusted for in-year depreciation charges.
- **Inventories** – possibly based on a percentage of the cost of sales.
- **Receivables** – possibly based on a percentage of revenue.
- **Cash or overdraft** – usually the balancing figure.
- **Trade payables** – possibly based on a percentage of the cost of sales.
- **Taxation** – the amount payable should be based on a percentage of the taxable profit for the year.
- **Dividends payable** – usually an estimate based on the profit after tax for the year.
- **Non-current liabilities** – the main item under this heading will be long-term loans. The amount will change if new loans are taken out in the year, existing loans are redeemed, or the redemption date is within 12 months resulting in a reclassification of the loan as a current liability.
- **Share capital** – the amount will remain constant unless new shares are to be issued. In such a case the share capital will increase by the nominal amount issued, while the premium must be added to the share premium account.
- **Accumulated profits** – remember to add retained profits for the year to the balance of accumulated profit brought forward from previous years.

### Cash flow forecasts

There are many ways of computing cash flow forecasts. Formats are not usually prescribed in the examination, so the aim is to identify the cash inflows and cash outflows for the year as quickly as possible. Here we will adopt the IAS7 Cash Flow Forecast format. The key issues are likely to be as follows:

**Net cash flow from operations**

- **Inventories** – show the change in value from one balance sheet date to the next.
- **Receivables** – show the change in value from one balance sheet date to the next.
- **Trade payables** – show the change in value from one balance sheet date to the next.
- **Gross profit before depreciation** – this should be taken directly from the income statement for the year.
- **Operating expenses** – this should be taken directly from the income statement for the year, but must exclude any depreciation charges.

**Returns on investments and servicing of finance**

- **Interest paid** – the amount paid in year, which might not be the same as the amount payable shown in the income statement.
- **Dividends paid** – the amount paid in year, which might not be the same as the amount payable shown in the income statement. Typically the amount will be equal to the previous year’s proposed dividend plus the interim dividend paid in the current year.
- **Taxation paid** – the amount paid in year, which might not be the same as the amount payable shown in the income statement. Typically this will be the payment of the taxation liability for the previous year.
Investing activities
- Non-current assets – include purchase cost of any assets procured in the year. Include sale proceeds of any assets disposed of in year.

Financing activities
- Share capital – include proceeds of any new share issues within the year, remembering to include the value of any share premium.
- Non-current liabilities – include proceeds from issuing new loans within the year. Include cash payment for any loans redeemed within the year.

In an examination you may be required to model annual cash-flow forecasts and other financial statements using expected changes in values, based on data for a base year. The example below demonstrates such an approach.

Example 1.B
Lavinia Products plc manufactures toys and other goods for children. It has been trading for 3 years. The shares in the company are owned by five people, all of them employed full-time in the business. The entity is doing well and now needs additional capital to expand operations.

Assume that you are a consultant working for Lavinia Products plc. You have been assigned to the entity to advise on its objectives and financial situation. As well as being provided with financial statements for the year to 31 December 20X6, the entity’s accountant gives you the following information:

1. Revenue and costs of sales are expected to increase by 10% in each of the financial years ending 31 December 20X7, 20X8 and 20X9. Operating expenses are expected to increase by 5% each year.
2. The company expects to continue to be liable for tax at the marginal rate of 33%. Assume tax is paid or refunded 12 months after the year end.
3. The ratios of receivables to revenues and payables to cost of sales will remain the same for the next 3 years.
4. The non-current assets are land and buildings which are not depreciated in the entity’s books. Capital allowances on the buildings may be ignored. All other assets used by the entity (machinery, cars, etc.) are rented.
5. Dividends will grow at 25% in each of the financial years 20X7, 20X8 and 20X9, as per the entity’s objectives.
6. The entity intends to purchase new machinery to the value of £500,000 during 20X7 although an investment appraisal exercise has not been carried out. It will be depreciated straight line over 10 years. The entity charges a full year’s depreciation in the first year of purchase of its assets. Capital allowances are available at 25% reducing balance on this expenditure.
7. Additional inventory was purchased for £35,000 at the beginning of 20X7. The value of inventory after this purchase is likely to remain at £361,000 for the foreseeable future.
8. No decision has been made on the type of finance to be used for the expansion programme. However, the entity’s directors think they can raise new medium-term secured debt if necessary.
9. The average P/E ratio of listed entities in the same industry as Lavinia Products plc is 1.5.

The entity’s objectives include the following:
- to earn a pretax return on the closing book value of shareholders’ funds of 35% per year;
- to increase dividends per share by 25% per year;
- to obtain a quotation on a recognised stock exchange within the next 3 years.

A summary of the financial statements for the year to 31 December 20X6 is shown below.

LAVINIA PRODUCTS PLC
Summarised income statement for the year to 31 December 20X6

<table>
<thead>
<tr>
<th></th>
<th>£’000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>1,560</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>(950)</td>
</tr>
<tr>
<td>Gross profit</td>
<td>610</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>(325)</td>
</tr>
<tr>
<td>Interest</td>
<td>(30)</td>
</tr>
<tr>
<td>Tax liability</td>
<td>(84)</td>
</tr>
<tr>
<td>Net profit</td>
<td>171</td>
</tr>
<tr>
<td>Dividends declared</td>
<td>68</td>
</tr>
</tbody>
</table>
FORMULATION OF FINANCIAL STRATEGY

Summarised balance sheet at 31 December 20X6

£’000
Non-current assets (net book value) 750
Current assets
Inventory 326
Receivables 192
Cash and bank 50
1,318

Capital and reserves
Ordinary share capital (ordinary shares of £1) 500
Retained profits to 31 December 20X5 128
Retentions for the year to 31 December 20X6 103
Total financing 731
Non-current liabilities
10% debenture redeemable 20X20 300
Current liabilities
Accounts payable 135
Other payables (including tax and dividends) 152
1,318

Requirements
Using the information in the case:
(a) prepare forecast income statements for the years 20X7, 20X8 and 20X9, and calculate whether the entity is likely to meet its stated financial objective (return on shareholders’ funds) for these 3 years;
(b) prepare cash-flow forecasts for the years 20X7, 20X8 and 20X9, and estimate the amount of funds which will need to be raised by the entity to finance its expansion.

Notes:
1. You should ignore interest or returns on surplus funds invested during the 3-year period of review.
2. This is not an investment appraisal exercise; you may ignore the timing of cash flows within each year and you should not discount the cash flows.
3. Ignore inflation.

Solution
(a) Income statements for the year to 31 December

<table>
<thead>
<tr>
<th>Year</th>
<th>20X6</th>
<th>20X7</th>
<th>20X8</th>
<th>20X9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>1,560</td>
<td>1,716</td>
<td>1,888</td>
<td>2,076</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>(950)</td>
<td>(1,045)</td>
<td>(1,150)</td>
<td>(1,264)</td>
</tr>
<tr>
<td>Gross profit</td>
<td>610</td>
<td>671</td>
<td>738</td>
<td>812</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>(325)</td>
<td>(341)</td>
<td>(358)</td>
<td>(376)</td>
</tr>
<tr>
<td>Depreciation</td>
<td>(50)</td>
<td>(50)</td>
<td>(50)</td>
<td>(50)</td>
</tr>
<tr>
<td>Interest on debt</td>
<td>(30)</td>
<td>(30)</td>
<td>(30)</td>
<td>(30)</td>
</tr>
<tr>
<td>Profit before tax</td>
<td>255</td>
<td>250</td>
<td>300</td>
<td>356</td>
</tr>
<tr>
<td>Tax</td>
<td>(84)</td>
<td>(58)</td>
<td>(85)</td>
<td>(111)</td>
</tr>
<tr>
<td>Profit after interest and tax</td>
<td>171</td>
<td>192</td>
<td>215</td>
<td>245</td>
</tr>
</tbody>
</table>

Notes:
1. Revenue and direct costs are increased by 10% and operating expenses by 5% per annum from 20X6 onwards.
2. Tax is calculated as:

<table>
<thead>
<tr>
<th>Year</th>
<th>20X6</th>
<th>20X7</th>
<th>20X8</th>
<th>20X9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit before tax</td>
<td>255</td>
<td>250</td>
<td>300</td>
<td>356</td>
</tr>
<tr>
<td>Add depreciation</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Capital allowances</td>
<td>(125)</td>
<td>(94)</td>
<td>(70)</td>
<td></td>
</tr>
<tr>
<td>Taxable profit</td>
<td>255</td>
<td>175</td>
<td>256</td>
<td>336</td>
</tr>
<tr>
<td>Tax at 33%</td>
<td>84</td>
<td>58</td>
<td>85</td>
<td>111</td>
</tr>
</tbody>
</table>
### Other relevant information

<table>
<thead>
<tr>
<th>Dividends</th>
<th>20X6</th>
<th>20X7</th>
<th>20X8</th>
<th>20X9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dividends payable (£'000)</td>
<td>68</td>
<td>85</td>
<td>106</td>
<td>133</td>
</tr>
<tr>
<td>DPS (%)</td>
<td>13.6</td>
<td>17.0</td>
<td>21.2</td>
<td>26.6</td>
</tr>
<tr>
<td>Percentage increase</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Percentage payout</td>
<td>49</td>
<td>44</td>
<td>49</td>
<td>54</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Earnings</th>
<th>20X6</th>
<th>20X7</th>
<th>20X8</th>
<th>20X9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit retained (£'000)</td>
<td>103</td>
<td>107</td>
<td>109</td>
<td>112</td>
</tr>
<tr>
<td>EPS (pence)</td>
<td>34.2</td>
<td>38.4</td>
<td>43.1</td>
<td>49.0</td>
</tr>
<tr>
<td>Percentage increase</td>
<td>12.4</td>
<td>12.1</td>
<td>13.8</td>
<td>13.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Value of equity (£'000)</th>
<th>500,000 shares at PE of 15</th>
<th>2,565</th>
<th>2,880</th>
<th>3,232</th>
<th>3,675</th>
</tr>
</thead>
<tbody>
<tr>
<td>£'000</td>
<td>£'000</td>
<td>£'000</td>
<td>£'000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shareholders’ funds</td>
<td>20X6</td>
<td>20X7</td>
<td>20X8</td>
<td>20X9</td>
<td></td>
</tr>
<tr>
<td>Ordinary share capital</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>Retained earnings</td>
<td>231</td>
<td>338</td>
<td>447</td>
<td>559</td>
<td></td>
</tr>
<tr>
<td>Shareholders’ funds</td>
<td>731</td>
<td>838</td>
<td>947</td>
<td>1,059</td>
<td></td>
</tr>
<tr>
<td>Profit before tax</td>
<td>255</td>
<td>250</td>
<td>300</td>
<td>356</td>
<td></td>
</tr>
<tr>
<td>ROSF (%)</td>
<td>34.9</td>
<td>29.8</td>
<td>31.7</td>
<td>33.6</td>
<td></td>
</tr>
<tr>
<td>ROCE (%)</td>
<td>31.0</td>
<td>27.0</td>
<td>29.0</td>
<td>31.0</td>
<td></td>
</tr>
</tbody>
</table>

(b) Cash-flow forecasts for

<table>
<thead>
<tr>
<th>20X7</th>
<th>20X8</th>
<th>20X9</th>
</tr>
</thead>
<tbody>
<tr>
<td>£'000</td>
<td>£'000</td>
<td>£'000</td>
</tr>
<tr>
<td>Inflows</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash from sales</td>
<td>1,697</td>
<td>1,867</td>
</tr>
<tr>
<td>Outflows</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payments for purchases</td>
<td>1,031</td>
<td>1,135</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>341</td>
<td>358</td>
</tr>
<tr>
<td>Working capital</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>Machinery</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>Tax payments</td>
<td>84</td>
<td>58</td>
</tr>
<tr>
<td>Dividends paid</td>
<td>68</td>
<td>85</td>
</tr>
<tr>
<td>Interest</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Total outflows</td>
<td>2,089</td>
<td>1,666</td>
</tr>
<tr>
<td>Net cash flow</td>
<td>(392)</td>
<td>201</td>
</tr>
<tr>
<td>Opening balance</td>
<td>50</td>
<td>(342)</td>
</tr>
<tr>
<td>Cumulative cash balance</td>
<td>(342)</td>
<td>(141)</td>
</tr>
</tbody>
</table>

The entity will need to raise a minimum of £342,000 plus interest payments – which at 12% would be £41,000 in the first year. A total of approximately £400,000 will therefore need to be raised.

**Calculation of cash from sales and payments for purchases**

Assuming, as per the question, that the ratio of receivables to revenue and payables to cost of sales remains the same (12.3% and 14.2% respectively), the calculations are as follows:

<table>
<thead>
<tr>
<th>20X7</th>
<th>20X8</th>
<th>20X9</th>
</tr>
</thead>
<tbody>
<tr>
<td>£'000</td>
<td>£'000</td>
<td>£'000</td>
</tr>
<tr>
<td>Revenue</td>
<td>1,716</td>
<td>1,888</td>
</tr>
<tr>
<td>Opening receivables</td>
<td>192</td>
<td>211</td>
</tr>
<tr>
<td>Less closing receivables (12.3% of revenue)</td>
<td>(211)</td>
<td>(232)</td>
</tr>
<tr>
<td>Cash received</td>
<td>1,697</td>
<td>1,867</td>
</tr>
<tr>
<td>Purchases</td>
<td>1,045</td>
<td>1,150</td>
</tr>
<tr>
<td>Opening payables</td>
<td>135</td>
<td>149</td>
</tr>
<tr>
<td>Less closing payables (14.2% of CoS)</td>
<td>(149)</td>
<td>(164)</td>
</tr>
<tr>
<td>1,031</td>
<td>1,867</td>
<td>2,053</td>
</tr>
</tbody>
</table>
FORMULATION OF FINANCIAL STRATEGY

An IAS 7 format is also acceptable.

<table>
<thead>
<tr>
<th></th>
<th>20X7</th>
<th>20X8</th>
<th>20X9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>£'000</td>
<td>£'000</td>
<td>£'000</td>
</tr>
<tr>
<td>Net cash inflow from operating activities</td>
<td>290</td>
<td>374</td>
<td>428</td>
</tr>
<tr>
<td>Interest paid</td>
<td>(30)</td>
<td>(30)</td>
<td>(30)</td>
</tr>
<tr>
<td>Dividends paid</td>
<td>(68)</td>
<td>(85)</td>
<td>(106)</td>
</tr>
<tr>
<td>Net cash inflow</td>
<td>192</td>
<td>259</td>
<td>292</td>
</tr>
<tr>
<td>Tax paid</td>
<td>(84)</td>
<td>(58)</td>
<td>(85)</td>
</tr>
<tr>
<td>Investing activities: fixed assets</td>
<td>(500)</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Net cash outflow</td>
<td>(584)</td>
<td>(58)</td>
<td>(85)</td>
</tr>
<tr>
<td>Net cash flow before financing</td>
<td>(392)</td>
<td>201</td>
<td>207</td>
</tr>
</tbody>
</table>

Net cash inflow from operating activities for 20X7

<table>
<thead>
<tr>
<th></th>
<th>£'000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross profit (before depreciation)</td>
<td>671</td>
</tr>
<tr>
<td>Less operating expenses</td>
<td>(341)</td>
</tr>
<tr>
<td>Increase in receivables</td>
<td>(19)</td>
</tr>
<tr>
<td>Increase in payables</td>
<td>14</td>
</tr>
<tr>
<td>Increase in inventory</td>
<td>(35)</td>
</tr>
<tr>
<td></td>
<td>290</td>
</tr>
</tbody>
</table>

1.13.3 Sensitivity analysis

Sensitivity analysis tests the effect of varying the projected value of important variables. When forecasting cash flows and financial statements, it is essential that uncertainties in estimates of costs and benefits are taken into account by, at the very least, undertaking a sensitivity analysis. Significant variables may include:

- revenue volumes
- levels of productivity
- costs of materials
- labour costs.

Sensitivity tests should be well designed; it is not sufficient to show the implications of an arbitrary variation around a particular cost or benefit. Some indication of the likely range of variation is needed.

1.14 Current and emerging issues in financial reporting

Developments in financial reporting may lead to the introduction of new accounting standards, or requirements for new forms of external reporting. Any such changes may affect individual items, the whole basis of accounts, or may require new techniques of accounting to be developed. There may be significant costs associated with compliance with new accounting standards or reporting requirements.

Entities will need to consider new changes to accounting standards or reporting requirements will affect key user groups.

Present and potential investors

Investors and potential investors will be interested in any changes that affect the way in which profit is calculated. They will also be interested in any changes to the way that capital instruments are treated and classified.
Lenders and potential lenders
Lenders will also be interested in any changes to the way that capital instruments are treated and classified. They will be particularly interested in changes to the accounting treatment of leases, and changes in the classification of items between debt and equity.

Employees
Employees will be interested in developments in human resource accounting. They will also be affected by changes to the accounting treatment for pension liabilities. For example, in the UK, the introduction of more onerous rules for accounting for pension liabilities has been claimed to be a factor in the closure of final salary pension schemes and their replacement with less generous schemes.

The general public
Members of the public and lobby groups may be most interested in changes to the reporting of social issues.

1.14.1 Reporting environmental issues
Protecting the environment is a key issue affecting everyone. Pressures are placed on businesses to ensure that the environment suffers minimum damage as a result of their products, processes or services.

Businesses are using recyclable materials, monitoring pollution levels and taking other environmentally sound measures to comply with customer demand for 'green' products. Indeed, as writers suggest, the work of the accountant is changing so as to encompass environmental issues.

This will include:

- Dealing with environmental taxes. France, for example, charges businesses for air and water pollution and reinvests those taxes in pollution control.
- Investment appraisal will have to take environmental factors into account.
- Costing new pollution controls.
- Reporting on the feasibility of replacing materials for environmental purposes.
- Estimating the impact of ‘green’ consumer preference.

This general trend is extending to the annual financial report; entities are reporting information about their actions with regard to maintaining the environment.

Such disclosures include:

- level of toxic waste, energy usage and noise;
- policies regarding environmental care;
- comment on actions the entity has taken, for example in choice of raw materials or product policies.

The annual report is traditionally a vehicle for financial information about the entity. However, the users of the annual report represent a wide audience which extends beyond the shareholders and investors. Entities therefore view the annual report as a public relations document and report much voluntary information regarding their products, policies and so on and this now includes information about their actions towards preserving the environment. Indeed some entities are almost obliged to report on environmental issues.

Generally, the trend in environmental reporting by entities has been slow and on an ad hoc basis. Some entities make an entity policy statement only, others may make an entity policy
statement and a statement of what action has been taken to implement the policy, not necessarily quantified. Finally, some entities may report physically audited measurements, such as water pollution, emissions or depletion of non-renewable resources, plus reporting on indirect effects such as the environmental impact of suppliers and the impact resulting from the disposal of a product, and consideration of stakeholders from an environmental point of view.

A powerful force in the demand for environmental information from entities arises from the ethical investment movement and the Green Alliance.

Furthermore, the green movement headed by groups such as Greenpeace and Friends of the Earth is making the public aware of environmental issues and forcing entities to care.

The situation is inconsistent. International bodies such as the United Nations, as well as the UK's Confederation of British Industries, have addressed the main issues. However their proposals have been complex and impractical for implementation by industry and standard-setting bodies.

Environmental issues are major concerns, and regulations issued by governments and international bodies are helping to ensure that environmental care is increasing. At present there are no mandatory requirements to publish results of environmental audits but some environmental bodies require that entities publish a summary of figures on pollution emissions, waste production, consumption of raw materials, energy and water, noise and a presentation of the entity's environmental policy. European Union proposals set standards for environmental issues, such as emission levels for pollution. It is also seeking a requirement for publication of these levels and targets.

As environmental regulations increase and demands from the public, consumers and investors become more onerous, entities will suffer the cost of these actions.

Contingent liabilities relating to the results of environmental audits, other clean-up measures, environmental disasters and other litigation due to noise or waste policies need to be disclosed in the financial statements.

The current situation is not wholly satisfactory and there is much ground to cover:

- Not all entities currently report environmental information; some entities may report environmental issues 1 year and none at all in another year.
- As disclosures are of a voluntary nature there is a danger that the information may be incomplete and therefore unreliable.
- The importance of disclosure of information varies according to particular industries. Chemical, oil, steel and other high-polluting industries are seen as being more responsible for reporting on environmental issues.
- The use of environmental issues appears to be more of a public relations exercise rather than an obligation.

However, adequate disclosure is of limited reliability unless it is adequately audited. There is at present no obligation to carry out an environmental audit. If such audits are carried out they are confidential, are not carried out to agreed standards, and the audit reports do not have to be published.

### 1.14.2 Reporting of social issues

The present nature of environmental reporting is a product of lobby groups, government and international pressures on entities and individuals to be aware of, and take care of, the environment.
However, this is not a new concept. Accounting theorists have always questioned the role of financial reports. Currently, they communicate financial information resulting from historic transactions entered into by the company. This relates primarily to the exchange of goods and services and excludes movements in human capital, the effects on the social environment and details of future financial position and performance.

The theory of socio-economic accounting is the process of ordering, measuring and disclosing the impact of exchanges between a firm and its social environment.

This involves looking at social resources and the exchanges between an entity and society.

Society is seen as a number of subsystems with which the company will interact. Interaction with the economic system is currently reported in the financial reports. Social accounting seems to extend the reporting function beyond this system to include:

- *The physical environment.* The entity will utilise physical resources such as coal, gas and agricultural products but the social cost of this use is currently not reported.
- *The meteorological and biological environment.* In its use of energy and the production of goods the entity will cause changes in the surrounding atmosphere and natural environment.
- *The sociological environment.* The way in which an entity attracts human resources, and uses those resources, will affect local society.

The activities of an entity may lead to an increase in social resources. For example the provision of employment in an area may result in a social benefit.

On the other hand, if the activities of an entity lead to the depletion of social resources this is termed a social cost. Social costs include:

- pollution: air, water, noise;
- depletion and destruction of animal resources;
- soil erosion and deforestation;
- unemployment and idle resources.

Social reporting would include a social income statement, recording social costs and benefits to different areas of society, and a social balance sheet disclosing staff assets, organisational assets, the use of public goods, financial and physical assets.

One of the most important papers to be produced on the subject was *The Corporate Report* (UK), published in 1975. It reviewed the objectives and role of the financial statements as the IASB has done in its *Framework*. *The Corporate Report* went further in advocating the publication of supplementary reports to meet the needs of other users. These were:

- *Statement of corporate objectives.* The statement could take many forms but would include all stakeholders’ objectives.
- *The employment report,* intended to give information on the number and details of employees, wage rates, the type of work and training.
- *Statement of future prospects.* *The Corporate Report* acknowledged that it was difficult to report on issues in this area. Yet it would provide vital information to all users.
- *Value-added reports,* showing the development of resources throughout the organisation and the interdependency of all parties (employees, government, capital providers, not
just profit for shareholders). A typical value-added statement shows the split of turnover between the interested parties:

**Value-added statement of ABC Group for the year ended 31 December 20X1**

<table>
<thead>
<tr>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
</tr>
<tr>
<td>Less: bought-in materials and services</td>
</tr>
<tr>
<td>Value added</td>
</tr>
<tr>
<td>Applied to</td>
</tr>
<tr>
<td>Employees</td>
</tr>
<tr>
<td>Wages, pensions and other benefits</td>
</tr>
<tr>
<td>Government</td>
</tr>
<tr>
<td>Corporation tax</td>
</tr>
<tr>
<td>Providers of capital</td>
</tr>
<tr>
<td>Interest on loans</td>
</tr>
<tr>
<td>Dividends</td>
</tr>
<tr>
<td>Retained by the company for future growth and capital expenditure</td>
</tr>
<tr>
<td>Depreciation</td>
</tr>
<tr>
<td>Retained earnings</td>
</tr>
<tr>
<td>Total allocated funds</td>
</tr>
</tbody>
</table>

The provision of such information would be costly. There would be a need for independent review or audit, further adding to the cost. The incorporation of this additional information in the annual report would become truly widespread only if encapsulated in regulation.

### 1.14.3 Inclusion of forecasts in the annual report

Why not require entities to include forecasts in their annual report? There has been discussion within the accounting profession on the issue of including forecast information in the annual report. A suggestion is that the primary statements should include an additional column for forecast budgets. This information is available within the management information system.

However, the implications for entities including this information are profound.

If the entity included an optimistic forecast and those forecasts were not met, then the market’s perceptions would be that management was incompetent, with resultant effects on the entity’s share price. If, on the other hand, the forecast was too pessimistic then again this would have adverse effects on the entity’s share price and would result in undervaluation of the entity. Furthermore, if the entity outperformed the forecast, perceptions may be that this was due to luck rather than management efforts.

Some authors have stated, however, that these potential effects would force budgets to be realistic. Annual reports would include management’s analysis of the forecasts and so produce a new type of reporting. It would also force management to consider the effects of decisions.

The analysis of the financial report and information for decision-making would be more relevant from a user’s point of view.

Those who do not wish to include forecasts cite commercial reasons. Forecasts would have to include commercial plans and so provide valuable information to competitors. However, if this was a mandatory obligation, competitors would of course have to provide that information as well.

Provision of additional information would be costly. Costs include not only the financial costs of obtaining the information but also costs to the firm from action taken on the information by investors, customers and suppliers.
1.14.4 Reporting of human capital

The difference between the market value of an entity and shareholders’ funds in the balance sheet can be due to factors such as staff with good management skills, the existence of certain technical skills within the company and know-how. These human resource factors are not quantified in the financial statements at present but are, all the same, recognised by the markets involving an entity.

An asset is defined by the IASB Framework as ‘… a resource controlled by the enterprise as a result of past events and from which future economic benefits are expected to flow to the enterprise’. Certainly the skills and talents of employees and management will contribute to the generation of future benefits to the entity. The problem arises as to how to value the human resource factors. The wages and salaries paid to management and employees for their skills are expensed in the year. However, if the view was taken that human resources were an ‘asset’ of the business, the costs would be capitalised in the balance sheet and depreciated or charged to the income statement in line with the income they generate.

Valuation of the ‘asset’ would be in line with other methods used in the balance sheet: historical cost, replacement cost, economic value.

The historical cost method would involve capitalising all costs associated with recruiting, selecting, employing, training and developing an employee and then amortising these costs over the expected useful life of the asset.

Problems arise with this method. The value of the asset’s ability to generate benefits to the firm does not necessarily correspond to the historical cost and amortisation. Furthermore, different entities will incur differing costs for training and development, for example therefore hampering comparisons.

The replacement cost method estimates the cost of replacing the existing human resources, that is, what costs would be incurred to bring new staff to the level of competence of existing staff.

Again, however, this value does not equate with the value of future benefits the asset will generate. Also, as with other physical assets there may not be an equivalent replacement for a given human asset. Finally, estimating the replacement costs would be very subjective.

An economic value for a human asset could be obtained using an adjusted discounted future wages method. Discounted future wages are adjusted by an efficiency factor to measure the effectiveness of human capital of an entity.

There are many other non-monetary methods of valuing human resources of an entity and these would involve much subjectivity.

1.15 Summary

This chapter has aimed to provide an overview of financial strategy. We discuss the main groups into which financial management decisions can be classified: investment, financing and dividends.

We explain how financial strategy is applicable to, and equally important in, organisations which do not seek distributable profits, emphasising that the key factor is the assessment of the value of the output of an entity and especially the excess of that value over the cost of inputs, whether it be in the private or the public sector.

Dividend payments have been shown to be irrelevant to shareholder wealth in perfect capital markets. When market imperfections – such as taxes, transaction costs and imperfect
information – are considered, the situation is less clear. Entities tend to adopt stable and consistent dividend policies, in order to attract a clientele of investors whose personal taxation position suits that particular policy. Unexpected fluctuations in the dividend payment tend to be avoided because of the informational content of the dividend which is being signalled to the market.

We discuss the impact of economic and regulatory constraints on financial strategy. We have illustrated in detail an approach to modelling and forecasting cash flows and financial statements and identified some current and emerging issues in financial reporting.
The first article considers the trend towards corporate social responsibility reporting. The second article discusses the trend for profit-making entities to purchase their own shares. There are often good reasons for an entity to purchase its own shares; this article considers why it sometimes goes horribly wrong.

**Green signals ‘go’**


Sustainable development has crept up the corporate agenda in the past few years. An issue that was still a marginal concern when the Body Shop became a public company in 1985, it now claims a place in boardrooms around the country. This surge of interest is less connected to mounting evidence of manmade environmental and social disasters than to intense pressure from protesters. The firms that were targeted in anti-capitalist riots and media campaigns in the past few years are often the ones putting corporate social responsibility (CSR) on the map – Shell after publicity about Nigeria and Brent Spar, Monsanto after GM crops, Nike after the NoLogo campaign and the Seattle riots. They are recognising that the activists cannot be ignored.

Managing reputational risk has become a serious corporate governance concern. This is hardly surprising considering that brands can be an entity’s most significant intangible asset. In addition, the Internet has made it much easier for people to disseminate information and voice their dissatisfaction.

Many firms’ first line of defence is to produce a CSR report. Voluntary reporting guidelines are emerging all the time, as are independent social and environmental auditing standards. This is a positive development. The more we know about what entities are doing, the more we can make informed investment choices. But, if such reporting fails to translate into a mechanism for improving performance, it cannot reduce an entity’s environmental impact or promote social equity. Indeed, there is a danger that, in a rush to appear good, the purpose of reporting is being forgotten.

In June, British American Tobacco issued its first social report. Although it was designed to meet standard AA1000 and was audited by an independent verifier, it failed to convince BAT’s key stakeholders (many of whom had refused to participate in its production). The company was accused of hypocrisy. BAT’s arguments that no industry is wholly good or bad, and that risky businesses are in particular need of this type of report, may be valid – up to a point. The problem is that no amount of stakeholder engagement will make cigarettes safe. An attempt to build trust by increased disclosure inevitably seems misplaced.
Real sustainability involves structural changes, either to your value chains or to your entire business model. This may seem drastic, but we have to tackle the paradox that, while capitalism has created more wealth than any previous economic system, it has done so at a price. Environmental rating agency Trucost recently said that no UK company would be profitable if the cost of its impact on the environment was reflected in its bottom line. It is debatable whether any of the most respected entities of the past 100 years have ever made an environmentally sustainable profit.

If BAT is at one end of the scale, the Co-operative Bank is at the other. Last year, it refused £2.5m of business on ethical grounds. Around 98% of the bank’s electricity comes from renewable sources, its water consumption has been cut by 9.1% and it saves £3.5m a year primarily from reduced paper usage. It also reports that its ethical stance has contributed £20m to its pre-tax profits of £107.5m. In the Co-operative Bank’s case, sustainability is about adjusting what it does, not simply making it transparent.

Reporting should be the visible part of the structure. It should be supported by a robust internal architecture for measuring performance and a decision-making capability that reflects a wider range of concerns. Of course, more firms should still be encouraged to produce audited CSR reports. Entities such as the Co-operative Bank show the benefits to be gained from stakeholder engagement. If nothing else, it helps firms to stay ahead of the regulators. Compliance may still be the biggest driver for sustainable development.

Those who trust that industry interest will prevail over government intervention should remember not only the mandatory Operating and Financial Review (part of the Company Law Review), but a spate of EU legislation such as the end-of-life vehicle and end-of-life electronic and electric equipment directives. This autumn Linda Perham MP is reintroducing to the Commons the corporate responsibility bill, which seeks to put social reporting on a par with mandatory financial reporting. It may not go through, but it has been signed by more than 200 MPs and reflects a change of mood on this issue.

It is unrealistic to expect entities to drop profit-making operations to save the planet. We should focus instead on findings such as those of the Business in the Environment survey that FTSE-100 firms are gaining competitive advantage by being ahead of the law in this area. Change should be incremental, not accompanied by a big regulatory stick. Enforced regulation will at best produce grudging compliance. For markets to operate with sustainable development principles firmly embedded as a basis for decision-making, this is not enough. There has to be a programme of education that should engender a gradual shift in views.

Share buybacks


For several years now, share buybacks have been extremely popular. Companies that have done this recently include BP, Barclays Bank and Alexon. But are they really good for the firms and shareholders concerned?

There are several reasons for their popularity, including the fact that if a company had surplus cash in the past there was always a problem about what to do with it. Some directors have used the extra funds to build empires by embarking on ill-considered takeovers.
with disastrous results. Surplus cash can also make managers complacent. For example they may allow debtor and stock levels to rise without justification, or may fail to sort out loss-making divisions promptly. A share buyback can provide the solution by returning the money to shareholders who can use it to take other investment opportunities.

The Companies Act 1981 allowed limited-liability companies incorporated in Great Britain to purchase their own shares for the first time. Share buybacks have been aided by the subsequent abolition of advance corporation tax.

Another factor driving firms to buy back stock, according to The Economist, may be the short-term aims of powerful institutional investors, particularly in the United States. Anthony Bolton of investment management firm Fidelity International has been quoted as saying: ‘We also like the use of share buybacks. If a company is going to make an acquisition, for example our view is that it should test this option against the alternative of buying back its own shares.’

The buyback trend has probably been compounded by the end of the 1990s investment boom. Where companies once reinvested cash flows for expansion projects, they now tend to pay for share buybacks, dividends and other forms of capital distribution. This implies that the private sector cannot supply growth and capital appreciation. Companies are facing almost impossible pressure to show that they are investing their capital wisely. ‘Just give it back to us’ is the growing refrain of investors.

The main reasons for a company to buy back its own shares are that it will increase the following:

- Earnings per share.
- The share price.
- The value of executive stock options.

The object of increasing earnings per share works best when interest rates are low and the company’s share price is also low. In some instances, the interest earned on the surplus cash used for the share buyback can be lower than the cost of the dividend on the shares purchased.

A buyback in itself won’t necessarily increase a company’s share price. It’s more likely to if it’s part of a package – for example if it’s connected with selling off an underperforming subsidiary. The fundamentals of the business have to be sound, too. The move can make financial sense when a company has a cash surplus over and above its day-to-day needs, a good cash flow and little or no debt, and if it’s not planning to spend substantial amounts on expansion through capital expenditure or acquisitions in the near future.

In theory, the best time to put a share buyback into operation is after a stock market crash, when the shares of many companies can be purchased for less than net asset value. But, even if a company has surplus cash in the bank, its directors will normally have other things on their minds during a crash – survival, for example. Another time when directors are likely to be tempted to effect a buyback is when the company’s shares are out of favour with the market and are going cheap as a result. A company that decides to buy back its shares and announces this, along with plans to enhance future trading, could purchase the stock at below net asset value, so increasing the net asset value and earnings per share, as well as the share price.

There has, however, been a disturbing trend whereby companies borrow to fund share buybacks. One reason given for this is that it can reduce the cost of financing the business, since the interest paid is deductible for corporation tax, while dividends are non-deductible. But this works only if the interest paid (less corporation tax) on the loan is lower than the
dividend paid on those shares. It also does not take into account the possibility that the company will hit hard times and be forced to reduce or even cancel its dividend, while still paying interest on its borrowings.

Other problems can occur if the company has raised money to fund the share buyback by issuing loan stock. There is always the chance that this loan stock may have to be repaid, perhaps many years later, during a recession when its bank balance is insufficient for the purpose. If so, the company may struggle to raise money at a difficult time. In addition, a severe economic downturn may cause the value of a company's assets to fall, so reducing the security for its borrowings.

Despite these potential pitfalls, directors who have stock options must be tempted to vote for a share buyback even when it is funded by borrowings. An increase in earnings per share, a higher share price and executive stock options all have merit, but not if the buyback risks putting the company into danger many years ahead. When considering a share buyback, the overriding principle for the board of directors must be the long-term interests of the shareholders.

So how successful are buybacks? The Financial Times reports that at BP's annual general meeting, Rich Silk, a private shareholder, raised a serious point when he said: 'I'm disturbed to see more buybacks than dividends. I've studied the effects of buying back shares and it doesn't seem to work.'

Tony Jackson, writing in The Sunday Telegraph, comments that Rentokil Initial's balance sheet, at first glance, is in tatters: it has a net debt of £1.1bn and shareholders' funds of minus £600m. This is the legacy of Sir Clive Thompson, who built up the business but was ousted in May 2004. Having grown spectacularly in the 1990s, Rentokil hit problems in 1999–2000. Thompson's response was to mount a hugely ambitious share buyback programme that cost £1.9bn over 5 years (it was halted as soon as he left). Rentokil was almost wholly ungeared at the outset and buybacks were bizarrely popular at the time. The fewer shares in issue, the higher the earnings per share. In those bullish days, it was unquestionable that the share price would rise accordingly.

In fact, as financial theorists have pointed out for decades, the rise in earnings per share is cancelled out by higher gearing. More debt means more risk and a correspondingly lower rating for the shares, as Rentokil discovered. In 2000 alone, Thompson paid £1.3bn for shares at an average price of 167.5p, which is higher than the price at the time of writing.

Share buybacks are as popular as ever and, where they are financed by surplus cash, they are generally a good thing both for the company and its shareholders. But, where buybacks are financed by borrowings the effect is questionable at best. History tells us that it's not a good idea to substitute debt for share capital. The concept of equity share capital has stood the test of time. A company must be adequately capitalised both for growth and to withstand financial storms. FM

Michael Goddard is the former finance director of Concord Express Transport. Since his retirement, he has become a journalist specialising in financial matters.
Revision Questions

? **Question 1**
The objective of a health authority (a public-sector entity) is stated in its most recent annual report as:

To serve the people of the region by providing high-quality healthcare within expected waiting times.

The ‘mission statement’ of a large plc in a manufacturing industry is shown in its annual report as:

‘In everything the company does, it is committed to creating wealth, always with integrity, for its shareholders, employees, customers and suppliers and the community in which it operates.’

**Requirements**

(a) Discuss the main differences between the public and private sectors which have to be addressed when determining corporate objectives, or missions.  

(8 marks)

(b) (i) Describe three performance measures which could be used to assess whether or not the health authority is meeting its current objective.  

(6 marks)

(ii) Explain the difficulties which public-sector entities face in using such measures to influence decision-making.  

(6 marks)

*Note: Candidates may draw on their knowledge and experience of the public sector in their own country when answering this question.*

(Total marks = 20)

? **Question 2**

Assume that you are a financial analyst attending a shareholders’ meeting at PDQ plc on behalf of your employers, a large pension fund. Your entity is one of the few institutional investors in PDQ plc, which is a medium-sized listed entity.

The majority of the shareholders are small, private investors. At the shareholders’ meeting you overhear a group of shareholders discussing the entity’s dividend policy. Some of the comments you hear are as follows:

- ‘I think the entity should increase its dividend payout to the maximum it can afford without having to borrow. That way our returns are less risky.’
- ‘I don’t agree. I think the entity should reduce the dividend and retain even more of its earnings for future investment.’
‘I would prefer no cash dividend at all and receive annual bonus shares. The value of my shareholding would then immediately increase.’

‘I read somewhere that dividend policy has no effect at all on the value of the entity’s shares.’

**Requirements**

(a) Discuss the validity or otherwise of the shareholders’ comments.  
(15 marks)

(b) The expectations and requirements of institutional investors in respect of an entity’s dividend policy may be different in a number of respects from those of private, individual shareholders.

Explain these differences and comment on the problems PDQ plc might face in trying to reconcile the requirements of the two groups of shareholders.  
(10 marks)

(Total marks = 25)

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**Question 3**

When determining the financial objectives of an entity, it is necessary to take three types of policy decision into account – investment policy, financing policy and dividend policy.

**Requirements**

(a) Discuss the nature of these three types of policy decision, commenting on how they are interrelated and how they might affect the value of the entity (i.e. the present value of projected cash flows.)  
(10 marks)

(b) Describe the different function of treasury and financial control departments of an entity and comment on the relative contributions of these two departments to policy determination and the achievement of financial objectives.  
(10 marks)

(Total marks = 20)
Solutions to Revision Questions

Solution 1

(a) Among the differences between the public and private sectors of the economy, as far as objectives and missions are concerned, are the following:

- Those of the public-sector entities are likely to have been spelled out in a statute or vesting document. As such, managers would have difficulty in adapting them as conditions change. On the other hand, the directors of a private-sector entity are able to determine its objectives and mission themselves, and to change them as conditions dictate.

- The value of the output of a private sector entity is determined by paying customers, and can be incorporated in its objectives, missions and decision criteria. One of the main arguments for retaining an endeavour in the public sector is that it cannot be left to the market to determine its income. Unfortunately, however, top managers in the public sector are generally reticent about quantifying the value of such endeavours.

- In the private sector, failure to meet the aspirations of the various stakeholders (e.g. as listed in the plc mission statement) brings penalties, and may trigger the demise of the enterprise. In the public sector, disbelief can be suspended for long periods, with the result that some stakeholders’ aspirations are ignored. Objectives often boil down simply to the aim to achieve the results spelled out in a plan imposed from above.

- The public sector is constrained by tactical controls in the shape of short-term cash limits. This often ushers in rationing, which amounts to a conflict between stakeholders. Private-sector entities can look far enough ahead to see how the interests can be harmonised – though not all avail themselves of this facility!

- Private sector entities are acutely aware of the need to earn a satisfactory return on investment (typically around 15% per annum in terms of operational cash flows in the United Kingdom). The public sector is only slowly moving away from the concept of capital being free at the point of delivery (a recipe for demand in excess of supply) and has not yet embraced the idea that it is a commodity which is freely available at a price.

(b) (i) Unfortunately, ‘high-quality healthcare’ and ‘within expected waiting times’ are rather vague. It would be useful to quantify them in some way. Assuming that is done, among the measurements which might be useful are:

- Waiting time for accident/emergency admissions, or arrival of ambulance, compared with expectation (or failing that, a regional or national average).

- Length of waiting lists for important elective surgery, again compared with expectation (or failing that, a regional or national average).

- Patients’ view as to quality of service, against declared aim.
(ii) Some of the difficulties of the public sector are just beneath the surface of the question. For example health authorities in the UK are responsible for the purchasing of healthcare from providers (typically NHS trusts). However, they are constrained by rigid budgets allocated by the NHS Executive. If an authority fails to live up to objectives along the lines of those quoted, or to achieve expected results, it could simply be because it does not have the funds. Letting waiting lists lengthen is the easiest way to keep within an inadequate budget. That is not a reason for not measuring performance of course, but it does affect the interpretation of the measurements.

Some performance measurements in the public sector can run counter to what constituents want and, in many cases, to common sense. Judging police forces on the basis of costs per crime recorded, for example discourages crime prevention. If surgeons were influenced by the measurement of how quickly they discharge their patients, they would not meet the patients’ aspirations. The more important things in life cannot be measured, because they have not happened – for example crimes and illnesses which have been prevented, or opportunities created.

The way forward is to be honest about constraints, for example to phrase the health authority's objective in terms of obtaining the maximum value in healthcare terms for a given budget.

Solution 2

(a) The fact that different shareholders have different views as to what the entity should do is hardly surprising, but some of the remarks could be based on misunderstandings. Dealing with each in turn:

- The idea that the entity should increase its payout to the amount it can afford has considerable merit in corporate governance terms in the sense that, to the extent that it acquired funds for expansion, it would have to make the case to its shareholders' general meeting. We do not know what the entity's borrowings are, so we do not know what impact there would be of establishing zero borrowings as the criterion. The shareholder should be dissuaded from thinking, however, that the net result of such a policy would be to reduce the risk associated with the returns to shareholders. The uncertainty associated with returns achieved by the entity depends on the projects in which it chooses to invest, and the individual shareholder is also subject to the risk that, when he comes to sell the shares, the price will be at a cyclical low.

- To the extent that funds are retained in the business, rather than paid as a dividend, the important question is whether the investments are viable, that is, they enhance the net present value of the equity. From an individual shareholder's point of view, there is a secondary question as to whether this enhancement will be reflected in the share price at the time he comes to sell his holding.

- Paying no dividend at all is an extreme case of the situation described in the previous paragraph. The viability of the investments the retentions would fund is what affects the value of the business (as an entity and therefore, indirectly, to its shareholders). There is no necessity to capitalise the retentions in the form of a bonus issue – indeed, the effect of doing so is to make them undistributable for ever more, thereby weakening shareholder power vis-à-vis the directors.
The net cash flow attributable to shareholders is a function of the investment and borrowing decisions made by the board of the company concerned. In other words, the difference between distributions (e.g. dividends) and financing (e.g. rights issues) is predetermined. Directors can ‘mix and match’ these two components as they see fit, and there is a spectrum of possibilities, from paying high dividends and having frequent rights issues, to retaining a high proportion of profits and occasionally buying back some of their shares. There may well be some tax benefits – for some shareholders at least – in adopting a particular policy. This will be identified by a treasury function which has the aim of maximising the proportion of entity value which is attributable to the equity. Whether this value is reflected in the share price at any particular point in time is, of course, a different question again.

If the speakers accept these comments, they might well ask what dividend policy does make economic sense. The answer is to see the dividend as being a return to shareholders of those funds which cannot be invested for a return in excess of the cost of capital. This would make dividends as volatile as the rest of the environment, but is consistent with a rational investment policy (i.e. projects are supported if they show positive net present value) and recognises that the share price is part of a zero-sum game: for every buyer there is a seller.

Over and above those considerations, it should be recognised that there are a number of factors, given current regulations and practices, which prompt many people to see short-run share prices as important in themselves. If enough people believe that share prices are a function of current dividends then they will be, and this will influence directors’ decisions – especially if they have some share options about to mature. Setting out to maximise the short-term share price will rarely maximise the long-term financial health of the entity.

(b) One theory of dividend policy is that an entity attracts particular types of shareholder because of its policies, including its dividend policy. This is known as the ‘clientele’ effect. This effect might influence the attitudes of the two types of shareholder mentioned in the question. Other considerations are as follows:

- It is likely that institutions would press for a higher payout, as they did in 1991–1992, when entities were reporting lower profits.
- Small private investors are less easy to categorise. If they are wealthy they may prefer capital gains because they are tax-efficient (even when tax rates are the same there is an annual tax-free allowance, and capital gains tax is not paid until it is assessed. Dividends are taxed at source). If they are not particularly wealthy they may prefer a high, stable dividend which guarantees them a regular income. In fairness, these individuals are most likely to prefer investment in gilt-edged securities, high-quality corporate debt, or National Savings.

How the entity deals with these possible conflicts depends on a number of factors:

- whether it is happy with the mix of individual and institutional shareholders it has at present, or whether it wished to attract more institutions;
- market image – if it is to satisfy institutions it may need to raise dividends even when it cannot afford to (as noted above) or when it does not wish to;
- its belief in the importance of dividend policy.
Solution 3

Aim of question. This question dealt with the determination of financial objectives and the role of treasurer and financial controller. The question aimed to test candidates’ abilities to examine, evaluate and assess the policy decisions and organisation structure of an entity.

Tips/guidance/common errors
- Most candidates made a satisfactory to good effort at Part (a).
- Not many candidates managed to discuss the interrelationships of the three policies and how they affected the value of the entity.
- Many candidates spent far too long discussing dividend policy to the detriment of the answer as a whole.
- Answers to Part (b) of the question were varied.
- Most candidates recognised the major functions of the two departments but these were often provided as a list with no discussion of the relative contributions to the achievement of financial objectives.

This question examines the following syllabus area:

(i) The finance function.

The three key decisions of financial management:
- The role of the treasury function;
- The benefits and shortcomings of establishing treasury departments as profit centres and cost centres;
- The financial objectives of different organisations.

(a) Investment decisions involve the analysis and appraisal of capital expenditure projects, acquisitions, mergers and disinvestments, together with the related committal of funds; also decisions relating to working capital and trade investments, with the aim of maintaining satisfactory returns for the entity. Financial controllers will assess the likely cash flows of the various alternatives and identify the one with the maximum net present value.

Financing decisions relate to obtaining suitable and adequate funds with which to operate the entity, and to the desired level of gearing represented by the most appropriate combination of short-, medium- and long-term debt, together with equity, including internally generated funds. If capital needs to be raised the entity will seek that mix of sources that minimises the weighted average cost of capital.

Dividend decisions are based in part on making payments to shareholders that will currently satisfy their desired long-term rate of return and thereby help to maintain the entity’s share price. They are also based in part on retaining sufficient profits to sustain and advance the level of operations to secure shareholders’ aspirations for the future. The key decision is whether shareholders would be better off having money now or allowing it to be reinvested in the entity to produce a higher level of cash flow in future.

The three kinds of decision are subsets of comprehensive financial management and are linked by the twin foundations thereof: cash flow and the cost of capital. Financial management is about heeding the discipline of the market economy (that only enterprises that can offer the prospect of an adequate return will be able to raise the money required to fund their growth) and translating it into a criterion for the deployment of funds (to business opportunities that offer the prospect of an adequate return, that is,
in excess of the cost of capital). On this (dynamic) basis, dividends reflect the amount of cash not required for investment or reducing borrowings.

(b) In summary, a treasurer handles the acquisition and custody of funds, whereas the controller has responsibility for accounting, reporting and control.

The CIMA Official Terminology describes treasury management as the function concerned with the provision and use of finance. The main functions of such a department include:
- establishment of corporate financial objectives;
- managing the entity’s liquid assets – cash, marketable securities, etc.;
- managing the entity’s funding – determination of policies, identifying sources and types of funds;
- corporate finance and related issues, such as taxation, pension fund investment, etc. (although these functions are sometimes performed by the controller);
- (in a multinational) dealing with currency management – dealing in foreign currencies, hedging currency risks, etc.

The financial control function is concerned mainly with the recording and reporting of financial information such as:
- preparation of budgets and budgetary control;
- preparation of periodic financial statements such as monthly accounts and annual accounts;
- management and administration of activities such as payroll and internal audit (which in some cases may be a separate department responsible directly to the finance director).

From the above it appears that treasury has the main responsibility for setting corporate objectives and policy, and financial control has the responsibility for implementing policy and ensuring the achievement of corporate objectives. This distinction is probably far too simplistic: in reality, both departments will make contributions to both determination and achievement of objectives.

There is a circular relationship, in that treasurers quantify the cost of capital, which controllers use as the criterion for the deployment of funds; and controllers quantify projected cash flows, which in turn trigger treasurers’ decisions to employ capital.

In smaller entities the functions of treasury and financial control may be combined, and even in larger entities the two roles often include related activities – for example management of cash. Although the controller has the main reporting responsibilities, the treasurer will typically report on cash flows and cash management. In some cases, ownership of responsibility for certain activities is not clear-cut. For example credit control, taxation, insurance and pensions are sometimes handled by the treasury department, sometimes by the controller’s department.