

Finance Training for the Non Financial Manager

The subject and language of finance are often viewed as difficult and bewildering especially to those managers not schooled in the dark art of accountancy. They need not be.

Why it is Important to Understand Finance

It is imperative to understand the subject and language of finance if managers are to communicate with authority within a business. After all, finance is the language used in the board room. Without a grasp of some basic financial concepts, it can be easy to take what appears to be a wise decision, but one that nevertheless is ill informed and one that adversely affects the financial health of the business. These unintentional own goals happen every day in every business and at every level. Own goals are usually career limiting.

Those not comfortable with finance and the appropriate use of its language invariably find themselves struggling to operate as effectively as they could. In contrast, those that do:

- Are better able to focus on what is important
- Succeed in making and taking better informed decisions
- Are more effective
- Operate with more authority
- Get promoted faster and more often

Whilst finance is not rocket science, it is nevertheless a challenge for many managers especially those who perceive themselves not to be good at maths. However, as with any life skill, finance can be learned. All it takes is a willingness to try and a good tutor.

The Difference between Financial Accounts and Management Accounts

At a fundamental level, there are two types of accounting information:

- Financial accounts
- Management accounts

Financial accounts are geared towards external users of accounting information (i.e. investors, industry commentators and government agencies), whereas management accounts are geared towards internal users of accounting information.

Companies that are incorporated under the Companies Act 1989 are required by law to prepare and publish financial accounts. Financial accounts describe the performance of a business as a whole (i.e. at the level of the legal entity), rather than analysing the component parts of a company. Financial accounts are prepared for a specific period of time, typically a year. The specific period is referred to as the 'trading period', and the period end date as the 'balance sheet date'. Financial accounts have three key statements:

- The profit and loss statement showing income and expenditure for the trading period

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- The balance sheet statement showing a breakdown of the net book value (NBV) of the company's assets and liabilities at the period end date
- The cash flow statement showing a breakdown of the inflows and outflows of cash during the trading period

Financial accounts are historic, and most of the information that is provided, is financial in nature.

In contrast, management accounts are used to help management record, plan and control the activities of a business and to assist in the decision-making and decision-taking processes. They can be prepared for any period of time such as daily, weekly, monthly or yearly. Reports can be both forward looking or historic or a mix of both. Whilst there is no legal requirement to prepare management accounts, few businesses could expect to survive or thrive without them. Management accounts are prepared to meet the specific needs of the user and typically include both financial and non financial information. There are an infinite number of potential management reports a business could choose and examples include:

- Profit and loss showing actual versus forecast budget performance including this year versus last year to date and year to go
- Sales and margin report by business unit, product or service or by customer type and or by specific customer
- Number of employees, employee costs and productivity
- Customer service levels by customer, by depot and by product type

With management accounts, it is important that managers receive the information they need to run the business in good time and in a useable format.

How Financial Accounts are used

A company's financial accounts are mostly used by people outside the company. They can be used to analyse its performance over time, to compare its performance with other companies operating in the same industry and help actual and potential investors determine whether the company is an attractive investment prospect.

When analysing a company's financial accounts, there are numerous possibilities. These include:

- Performance analysis
- Trend analysis
- Ratio analysis
- Cost structure analysis
- Balance sheet analysis

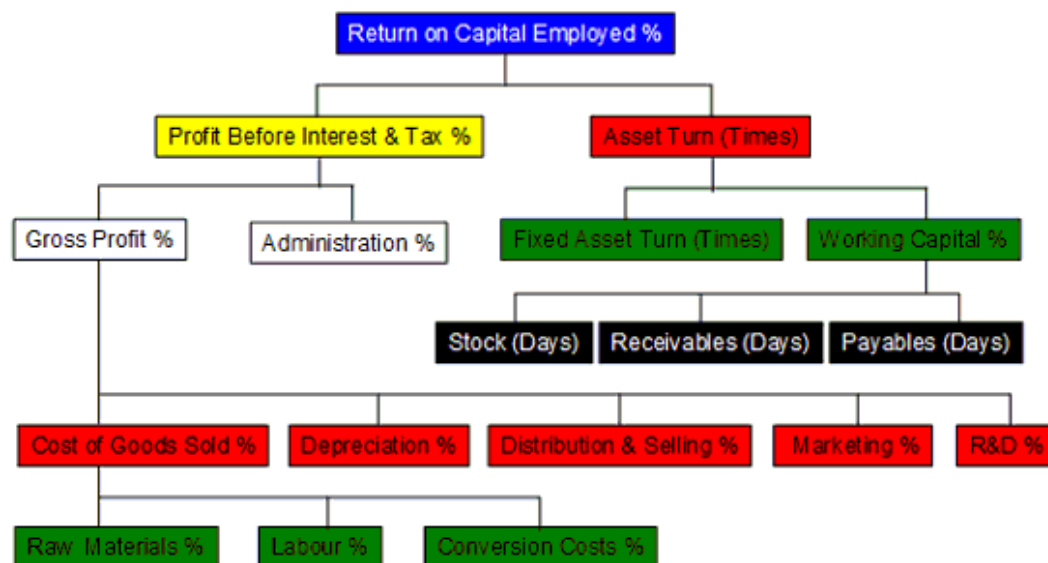
When analysing or comparing companies, it is important to compare apples with apples and remove distortions such as depreciation, amortisation of goodwill and non-recurring one-off costs or gains (known as exceptional items). Furthermore, it is important to remember that balance sheets are prepared on the basis of historic costs rather than current market valuations. This distinction can be the source of considerable variance between companies. For example, one company might own the land of a site it

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purchased 100 years ago whereas another might own the land of a site it purchased 5 years ago. At market values, the 100 year old site might be worth more than the 5 year old site, but on the balance sheet, the 5 year old site might have a significantly higher net book value (NBV) than the 100 year old site. Likewise, another company, may not own a site at all, instead choosing to lease one. If these three companies were competitors, any comparison of return on sales % (i.e. profit after tax divided by revenue) or return on capital employed % (i.e. profit after tax divided by net book value of capital employed), both of which are commonly used comparatives, would be prone to considerable misinterpretation. Nevertheless, despite the difficulties that arise due to technical accounting differences, it is still possible to gain deep insights into the relative performance and strengths and weaknesses of competing companies.

One such approach is to undertake a DuPont pyramid of ratios analysis, named after the DuPont Corporation which pioneered this form of performance analysis in the 1920's. This type of analysis is best done over a period of time, say 5 years, and will often unlock many important insights that would otherwise remain buried deep within the accounts.

PYRAMID OF RATIOS



Example for a manufacturing company

The pyramid of ratio's can also be used to analyse the performance of different business units within the same company.

Other commonly used comparative measures of company performance include:

- Total Shareholder Return (TSR) - dividends in the period plus the change in the share price over the period divided by the share price at the start of the period
- Return on Equity (ROE) – earnings in the period divided by the book value of shareholder funds at the period end date

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- Earnings per Share (EPS) – earnings for the period divided by the number of shares in circulation at the period end date
- Dividend yield (DY) – dividends declared in the period divided by the prevailing share price

When evaluating the financial health of a company, there are also a number of other commonly used ratios to assess the liquidity and the solvency of a company. These are:

- Liquidity
 - Current ratio – current assets divided by current liabilities
 - Quick ratio – liquid assets divided by current liabilities
- Solvency
 - Gearing (or leverage) – borrowings divided by capital employed
 - Interest cover – profit before interest and tax divided by interest paid

Liquidity is directly related to cash flows and assesses whether a company has sufficient cash to meet its working capital requirements. In contrast, solvency is a measure of a company's ability to meet its financial obligations as they become due, whether they are suppliers' invoices, tax payments, dividend payments or interest or loan repayments. To illustrate the difference between liquidity and solvency, consider an individual who has £1m invested in shares, but not enough cash to buy a train ticket. The individual is solvent, but far from being liquid. Many a solvent company has gone out of business due to it becoming illiquid and running out of cash. Good cash flow management is therefore a vital competence for every company and every business unit.

Measures of Profitability

Companies make use of several different measures of profit, and each company will have its own preference. It is important to understand this preference, because as the well-known adage goes, 'you get what you measure'. This is especially the case when bonuses are contingent on achieving a particular year end profit target. Commonly used profit measures include:

- EBITDA – earnings before interest, tax, depreciation and amortisation of goodwill, sometimes known as gross cash profits
- EBIT (or PBIT) – earnings (or profit) before interest and tax
- EBT (or PBT) – earnings (or profit) before tax
- Earnings – profit after tax

Cash versus Profit

Cash and profit are not the same. A loss making company can survive as long as it has cash. A profitable company cannot survive without cash. In business, cash is king.

A profit occurs whenever revenue exceeds expenses within a period. However,

- Not all expenses recorded in the profit and loss are cash costs – for example, depreciation and amortisation of goodwill are non cash costs

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- Not all expenses are recorded in the profit and loss account - for example, capital expenditure is recorded (i.e. capitalised) on the balance sheet

Furthermore, the profit and loss account is drawn up on an accruals basis with revenues being recorded when they are earned (i.e. the invoice date) and costs recorded when they are incurred. The actual receipts and payments of cash may be several weeks or months after the invoice dates depending on the terms of business negotiated with customers and suppliers. Similarly, corporation tax for the trading period does not usually become due for payment until 9 months after the period end date.

Cash flow is the life blood of all companies and it is important for every business to understand and actively manage its cash flows. A company's cash flow is made up of three main constituents:

- The cash flow from its operating activities – EBITDA less interest and taxes paid in the trading period plus the change in working capital during the trading period
- The cash flow from its investing activities – investment in capital expenditure less the cash received from any asset disposals during the trading period
- The cash flow from its financing activities – the change in equity and borrowings less interest and dividends paid during the trading period

Free cash flow is the cash that is free (i.e. available) to the investors who are the providers of a company's finance. Free cash flow is the cash flow from its operating activities less the cash flow from its investing activities.

It is also important that a company understands and actively manages its working capital cycle. This is because company's that go out of business usually do so because they run out of cash. Even a highly profitable company will go bust if it runs out of cash.

Working Capital Cycle

Working capital is the cash needed to finance the day to day operations of the business and to:

- Pay suppliers for goods and services
- Pay employees
- Pay for inventory and work in progress (WIP)
- Allow customers to buy now, but pay later
- Pay other creditors i.e. taxes to HMRC and dividends to shareholders

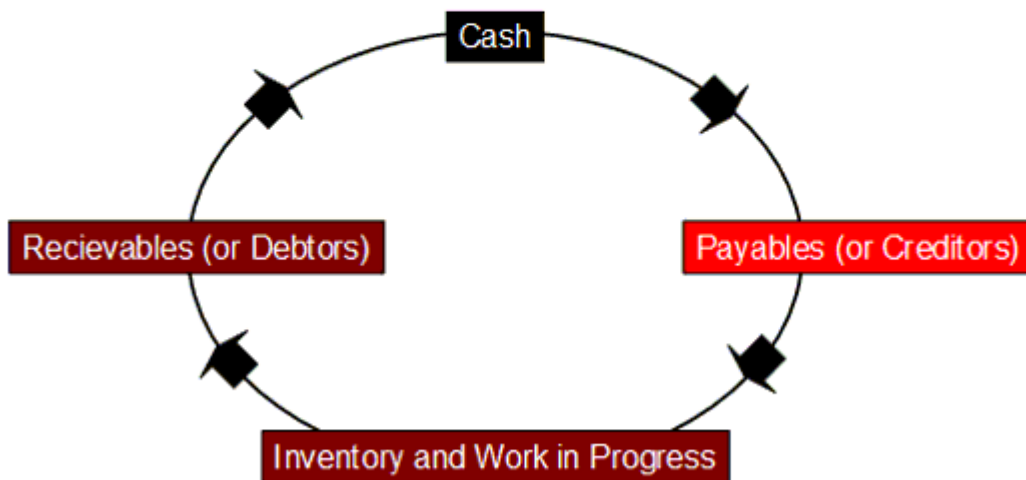
The working capital cycle or cash cycle is measured in days. It is calculated in three parts:

- Receivables (or debtors) days – this is the average number of days credit given to customers and is calculated by dividing the period-end value for trade debtors (i.e. the cash due to be received from customers at the period end date) from the balance sheet by the revenue for the year and multiplying by 365
- Inventory and WIP days – this is the average amount of cash tied up in inventory and work in progress during the year and is calculated by dividing the period end value for inventory and work in progress from the balance sheet by the cost of sales for the year and multiplying by 365

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- Payables (or creditors) days – this is this is the average number of days credit given by suppliers and is calculated by dividing the period end value for trade creditors (i.e. the cash due to be paid to suppliers at the period end) from the balance sheet by the cost of sales for the year and multiplying by 365

WORKING CAPITAL CYCLE



The cash cycle is calculated by adding the number of receivables (debtors) days to the number of inventory and work in progress days and then subtracting the number of payables (creditors) days. The larger the number of days in the cash cycle, the more cash that is 'tied-up' financing a company's day to day operations. Companies generally aim to shorten their cash cycle to free up cash for other uses i.e. to finance additional investment or to reduce borrowings. The cash cycle can be reduced by:

- Reducing the number of days credit given to customers (i.e. invoices are paid more promptly)
- Reducing the amount of inventory and work in progress
- Increasing the number of days credit given by suppliers (i.e. invoices payments are delayed)

More important than making a profit, is the ability of a company to convert profit into cash. This requires a business to actively manage its working capital. This is especially the case when undergoing periods of rapid expansion or contraction, both of which can put a severe strain on a company's management and cash flow.

Methods of Costing

Different industries adopt different methods for determining the costs of their products and services. Commonly used costing methodologies include:

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- Standard costing – under this technique, average standard costs are estimated even before the actual expenditures are incurred. Once actual costs have been incurred, these are then compared with the standard costs and the differences analysed.
- Marginal costing - the purpose of marginal costing is to study the relationship of how costs vary with volume. Understanding this relationship can be very important for new products especially if there is scope for volume growth and economies of scale productivity gains. Marginal costing is also known as variable costing or differential costing.
- Job costing - job costing is concerned with the determining the cost of each job or work order. Job costing is commonly used within professional services and by tradesmen.
- Contract costing - contract costing is used to cost contract work such as the construction of a new hospital or the refurbishment of a school. Each contract or job is treated as separate cost unit, and in principle, contract costing is no different from job costing.
- Batch costing - a batch is a group of identical products, and under batch costing, the batch is treated as one unit for the purpose of determining its cost. The total cost of the batch is divided by the total number of units in the batch to arrive at the average cost per unit. This method of costing is used in batch manufacturing industries.
- Operation costing - operation costing is suitable for industries where production is continuous and the units produced are exactly identical to each other. This method is used in industries such as fast moving consumer goods and mining.
- Process costing - process costing is used in industries where production is carried on through different stages or processes before becoming a finished product. Costs are determined separately for each process. The main feature of process costing is that output of one process becomes the raw materials of another process until the final product is obtained. This type of costing is used in industries such as textiles, chemicals and oil refining.
- Multiple or composite costing – composite costing is the combination of two or more of the above methods of costing. When a product comprises many components and assembled parts (for example an aircraft or motor vehicle) costs have to be ascertained for each component as well as for the finished product, and thus different methods of costing may be used at different stages.

Whichever costing method is used, it is important that managers understand:

- Whether the cost is an average or marginal cost
- What is included within the cost
- What is excluded from the cost
- What components of the cost are cash costs

Value Engineering

Value engineering is the process by which a company analyses the individual components of cost within a product or service in order to determine whether it can re-engineer the product's cost base in order to improve the value to the customer.

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The start point for value engineering is to understand the relationship between each individual cost component and the value to the customer associated with each individual component of cost. Consider the example of Comfort fabric conditioner.

VALUE ENGINEERING



The components of cost divide into four segments:

- High value to the customer and high cost – for these items, a company would rigorously analyse small changes in the specification of each component of cost in order to optimise the relationship between the value to the customer and the cost.
- High value to the customer and low cost – for these items, a company would seek to invest more cost in order to increase the value to the customer i.e. in the example, either by increasing the amount of fragrance in the product or by upgrading to a superior quality fragrance.
- Low value to customer and high cost – for these items, a company would seek to reduce the cost i.e. in the example, this could be achieved by either reducing the amount of plastic in the bottle or by reducing the amount of blue pigment in the bottle and or by introducing a quadruple concentrated formulation. Any cost saved can either be used to increase margin or to reinvest in high value low cost items.
- Low value to the customer and low cost – a company would typically ignore these items.

The win win from value engineering is to increase the customer perceived value whilst reducing the total cost.

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Pricing

Whilst often overlooked, pricing is the single most important part of value engineering. This is because:

- Price is the only element of the marketing mix that directly produces revenue. All the other elements produce cost.
- Small changes in price can have significant effects on volume, market share and profitability.

Whilst pricing is a business critical decision, few managers are skilled at pricing. This is hardly surprising given that pricing is a difficult decision involving complex inter-relationships between price, margin and volume. In the worst case, this can mean pricing is:

- either abdicated to the sales department, in which case, prices and profitability tend to be lower than they could otherwise be
- or to the accountants in which case, prices tend to be based on a cost plus mark up formula or the recovery of cost inflation

Neither situation is satisfactory as it results in a company failing to capture the true economic value of its products and services and consequently the company underperforms.

When considering the pricing decision, it is critical to appreciate that customers buy benefits rather than products or services (i.e. a hole in the wall rather than a drill) and that they buy on value not price per se. Furthermore, not all customers are homogeneous. This means different customers will value the same product or service differently and are therefore prepared to pay different prices.

Whenever the customer value increases, a company will gain market share and whenever the customer value diminishes, it will lose market share. In order to improve the value to the customer, a company can do one of two things. It can:

- Add more benefits, although this may add cost
- Reduce its price, although this will reduce margin

Customers always buy the product or service they perceive to represent best value. The customer's perception of value is therefore always relative to the competition.

Adding more or new benefits to a product or service enables a company to increase its prices providing these additional benefits are relevant and motivating to the target market customer. Adding benefits need not however necessarily lead to an increase in costs if value engineering is executed effectively.

There are five fundamental pricing relationships to understand. These are:

- Demand relationship i.e. how volume varies with changes in price
- Revenue relationship i.e. how revenue varies with changes in price
- Cost relationship i.e. how cost varies with volume and thus changes in price
- Profitability relationship i.e. how revenue minus costs vary with changes in price
- Supply relationship i.e. how volume supplied varies with changes in price

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Unfortunately, in many companies, these relationships are rarely understood.

Pricing Strategies

There are a number of commonly used pricing strategies. These include;

- Cost plus – with cost plus, a mark up is applied to the cost. Whilst being easy to administer, cost plus is an ineffective way to price as it ignores the value to the customer and the impact on profitability resulting from changes in price, margin and volume.
- Price taking – in markets where there are numerous small suppliers, the price is in effect set by the market forces of demand and supply over which no individual supplier has any influence. Price taking is common in commodity markets with undifferentiated products or services.
- Skimming – with price skimming, a company sets a high initial price during the early stage of a product's life cycle in order to capitalise on the product or service's novelty. As demand becomes more elastic due to increased competition, prices are progressively lowered to retain competitiveness. This strategy is effective when:
 - There are high barriers to entry
 - Demand is price inelastic – i.e. large changes in price only have small effects on volume
 - Product life cycles are short
 - There is limited scope for economies of scale
- Penetration – with penetration pricing, a company sets a low initial price in order to capture a large share of the market quickly. This strategy is a long term play where losses may have to be accepted in the short-term in order to discourage new entrants. Penetration pricing is an effective strategy when:
 - There are low barriers to entry
 - Demand is price elastic i.e. small changes in price have large effects on volume
 - There is mass market appeal for the product or service
 - Product life cycles are long
 - There is scope for economies of scale
- Segmentation – with price segmentation, different prices are charged to different customers for essentially the same product or service. Price segmentation is widely practised and examples include peak versus off peak travel and gym memberships. For segmentation to be an effective strategy:
 - The different segments must have different price elasticities
 - The lower price segment must not be able to resell to the higher price segment
- Bundling – with bundling, a company prices a bundle of complimentary goods and services at a price that is less than the sum of the individual components i.e. a packaged holiday or a Big Mac meal deal. Bundling is an effective strategy when:
 - There is a low marginal cost of bundling
 - It captures an increased share of the available customer spend
 - It increases the customer's spend

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Pricing is a business critical decision and one, where for many companies, there is considerable scope to improve economic performance.

Depreciation

Many managers and directors get confused by depreciation. In everyday language, the term is used to mean a reduction in the market value or worth of an asset. For example, a car that is said to have depreciated by £2,000 in a year, is commonly understood to be worth £2,000 less today than if it were sold a year earlier. Unfortunately, this is not what an accountant means by the term depreciation.

When an asset is purchased by a company, the accountants make an estimate for the asset's useful life. If it were a computer, the useful life might be three years, whereas if the asset were a new production line, the useful life might be deemed to be 10 years. A company is free to choose whatever depreciation policy it prefers and consequently, different companies purchasing identical assets will often have different depreciation policies. Furthermore, the useful life as defined by the accountants may or may not reflect the actual life of an asset.

If an asset were purchased for £10m and its useful life deemed to be 10 years, most companies would depreciate the asset on a straight-line basis over the 10 years i.e. the net book value (NBV) of the asset on the balance sheet would be reduced by £1m per annum for each of the 10 years and a depreciation cost of £1m per annum would be charged to the profit and loss for each of the 10 years. After 5 years, the NBV of the asset would be £5m and after 10 years, the NBV of the asset would be £0m. However, it is important to understand that the NBV is an accounting book value and one that does not necessarily reflect the market value of the asset, which may be more or less than the NBV at any point in time. Furthermore, whilst a depreciation cost of £1m per annum is being charged to the profit and loss for 10 successive years, this does not mean £1m cash leaves the company in each of those 10 years. This is because the £10m cost of the asset would have been paid to the supplier or suppliers as per the terms agreed when purchasing the asset.

Amortisation of Goodwill

When a company acquires another company, the difference between the purchase price and the NBV of the acquired company is called goodwill. Goodwill is included as an intangible asset on the balance sheet and can be considered to reflect the value of the intangible assets acquired. These intangible assets might include brands, trade marks, patents, intellectual property and the value of customer relationships, all of which are not easy and subjective to value other than at times of an acquisition. When a company makes an acquisition and pays a premium over the NBV of the company, this premium or goodwill, is normally written off on a straight-line basis over the expected useful life. This is normally not more than 20 years. For example, if the goodwill on acquisition were £60m and written off over 20 years, the NBV of goodwill on the balance sheet would be reduced by £3m for each of the next 20 years and an amortisation of goodwill cost of £3m would be charged to the profit and loss for each of the next 20 years. As with depreciation, amortisation of goodwill is a subjective, non cash cost. Indeed, it could be argued that when managed effectively, the value of the purchased intangible assets

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could increase substantially rather diminish. Thus, it is important to remember what the accounts represent and what they do not represent.

Investment Appraisal

One of the most important decisions for any business is investment of which there are two general types:

- Investment for growth i.e. increased capacity, new products and services, marketing expenditure, etc
- Investment for efficiency i.e. investments that reduce costs and or improve productivity

When considering an investment decision, a company will undertake an investment appraisal which will consider:

- The size or cost of the investment
- The internal return on investment
- The payback period
- The risk associated with the investment

Most companies start by estimating the impact of the investment on current and future cash flows and compare the with investment situation to a without investment base case. The incremental cash flows associated with the investment (i.e. the cash flows over and above the base case) are discounted by the company's average weighted cost of capital (WACC¹) to produce a single figure that values the cash flows in today's money. This is called the net present value (NPV) of the investment. If the NPV is positive, the project will yield a return greater than the company's WACC and will therefore create value, whereas if the NPV is negative, the investment would yield less than WACC and thereby destroy value. As with any set of estimates, garbage in generates garbage out. Consequently, any robust investment appraisal will also assess the impact of changes in assumptions on the projected cash flows and thus the NPV associated with the investment. This is called sensitivity analysis.

In addition, a company will also calculate the internal rate of return (IRR) and payback period associated with the investment. The internal rate of return is the discount rate that would result in a zero NPV, and the higher the IRR, the more attractive the investment. Payback on an investment is the period of time (projected or actual) that it takes for the incremental discounted cash flows associated with the investment to payback the initial capital investment. If the initial investment where £10m, and payback achieved in year 3, more than £10m of incremental cash would need to be generated from the investment in order to achieve payback. This is because cash today is worth less than the same amount of cash yesterday and more than the same amount of cash tomorrow.

Most companies are often confronted with a choice of investment projects and only limited funds available. In such circumstances, the company has to choose between competing projects. Over and above conducting an investment appraisal on each individual project, a company can also compare the NPV of each project per £1m invested. The resulting measure is helpful for assessing which value creating investment (i.e. those with a NPV greater than zero, or an IRR greater than the WACC) is the most efficient. The amount of capital invested is also a measure of risk and thus a company

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may prefer a portfolio of several lower yielding, 'less risky' investment projects than one more attractive, 'higher risk' big roll of the dice. Efficiency investments are generally considered to be lower risk than growth investments. This is because there are more knowns with the former and consequently, future cash flow projections should be more robust. Nevertheless, empirical studies show that growth investments have a much greater effect on creating value than efficiency investments.

Furthermore, when considering investments decisions, it is also important to remember that not all investments are capitalised on the balance sheet. For example, investments in:

- Sales and marketing activities
- Training and development
- Research and development

are usually charged to the profit and loss account rather than capitalised on the balance sheet. This is because most accountants consider these costs to be margin reducing expenses rather than investments per se. Nevertheless, irrespective of the accounting treatment, an investment is an investment and cash is cash. All investments of cash need rigorous appraisal, and not just those capitalised on the balance sheet by the accountants.

¹When investors entrust their money to a company, they expect to receive a return by way of compensation. For lenders, compensation is in the form of interest and for shareholders, compensation is in the form of dividends and share price appreciation. The minimum rate of return required by investors is called the 'opportunity cost of capital' and represents the rate of return foregone by not investing in an alternative investment with the same level of risk. The weighted average cost of capital (WACC) for a company is the opportunity cost of capital for each investor type (i.e. lenders and shareholders) weighted by the amount of funds provided by each investor type. The WACC represents the minimum return on investment required to create value.

Creating and Destroying Value

In economics, the value of a company is known as its enterprise value and is the net present value (NPV) of the company's future free cash flows discounted by its weighted average opportunity cost of capital (WACC). Value is said to be created whenever a company's enterprise value increases and value is said to be destroyed whenever the enterprise value of the company decreases. Investments with a positive NPV, or an IRR greater than a company's WACC, create value whereas investments with a negative NPV, or an IRR less than a company's WACC, destroy value.

It is, however, incorrect to conclude that a company that increases its profit in any given year has created value, or that a company where profitability has decreased, has destroyed value. This is because profit in any given year is a single period measure whereas the enterprise value of a company is determined by its future free cash flow performance. Indeed, a company that increases its profitability in one year may in fact be destroying value. Such a situation could arise if the company were either making insufficient investments to retain its competitiveness or has made a misguided value destroying investment decision. Similarly, a company where profitability decreased in any given year, may be creating value by virtue of it improving its ability to compete or because it has made a number of value creating investment decisions whose financial benefits have yet to materialise in the current year's profit and loss account.

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The Limitations of Accounting Profit

Accounting profit suffers from several limitations. These include:

- Single period measure – any single period measure is susceptible to manipulation especially when bonuses are contingent on achieving a particular year end target. Revenue may be brought forward by deep discounting towards year end even though this may prejudice performance in the following year.
- Arbitrary costs – depreciation and amortisation of goodwill are subjective non cash costs that reduce accounting profit, but have no impact on cash flow and thus no impact on a company's enterprise value.
- Ignore the opportunity cost of capital employed – When investors entrust their money to a company, they expect to receive a minimum return by way of compensation. This minimum return is ignored in traditional measures of accounting profit.

Economic Profit

Economic Profit (EP), sometimes mistakenly called Economic Value Added (EVA), is a measure of profitability that has become increasingly popular in the last 10-20 years, especially amongst complex multi-divisional or multi-national companies with stock market listings. The great beauty of EP is that it produces a single number which captures elements from both the profit and loss account and the balance sheet.

EP measures the surplus earned by a business after the deduction of all its operating costs including its liability to pay corporation tax and the opportunity cost of using investor's capital employed in the company.

Consider a company with a profit before tax of £10m, capital employed of £25m and a WACC of 12%. At its simplest, economic profit is calculated as follows:

Profit before tax	£10.0m
Corporation tax liability (£10m x 26% tax rate)	(£2.6m)
Charge on capital employed ²	(£3.0m)
Economic profit	£4.4m

²Capital employed x WACC in this example £25m x 12%

EP often provides powerful insights. Some business units and activities which have previously been thought to be good performers generating healthy accounting profits can sometimes be shown to be 'economically unprofitable' once the costs of tax and capital employed are taken into account. Nevertheless, reading too much into a single year's EP performance can be misleading. As with traditional accounting measures, EP is a single period measure, and thus susceptible to manipulation by management. For example, a positive EP may have been achieved by cutting back on research and development, training and or marketing expenditure, all of which are likely to impact adversely upon a company's enterprise value by impairing its future economic performance. Likewise, a negative EP may be the result of a significant capital investment in preceding years, which even if projected to be value creative, will have an

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adverse effect on near-term EP. It is therefore important to consider the future flows of EPs over time rather than EP in any one single period.

~ Paul New ~