

Alternative theories of the firm Problems with traditional theory The traditional profits maximising theories of the firm have been criticised being unrealistic. Such theories fall into two categories: first those theories that assume that firms attempt to maximise some other aim, provided that sufficient profits are achieved (these are examined in section 14.7); and second, those theories that assume that firms pursue a number of potentially conflicting aims, of which sufficient profit is merely, one of these theories are examined in section 14.3

Alternative maximising theories Long-run profit maximisation The traditional theory of the firm is based on the assumption of short-run profit maximisation. In an attempt to capture new markets and lead the field in gaming technology innovation, the three main protagonists are locked in battles not only to produce new and improved consoles, but also to develop new and improved consoles, but also to develop online gaming and mobile gaming – two major growth areas. Williamson argued that, provided satisfactory levels of profit are achieved, managers often have the discretion to choose what policies to pursue. Microsoft in particular intends to develop its Xbox live online service, into a 'digital entertainment centre', through which to distribute a range of entertainment content, including films and music. The criticisms are mainly of two parts: (a) that firms wish to maximise profits, but for some reason or other are unable to do so; or (b) that firms have aims other than profit maximisation. Thus the picture of firms making precise calculations of long-run profit-maximising prices and outputs is a false one. It may be useful, however, simply to observe that firms, when making current price, output and investment decisions, try to judge the approximate effect on new entrants, consumer demand, future costs, etc., and try to avoid decisions that would appear to conflict with long-run profits.

In search of long-run profits The video games war Traditional economic theory argues that firms will seek to maximise their short-run profits, and therefore adopt a range of strategies to achieve this goal. One way of doing this is to examine managers' expenditure on various items, and in particular on staff on perks (such as a company car and a plush office) and on discretionary investment. Both Microsoft and Sony have invested heavily in developing an online gaming capability. Nokia, the mobile phone manufacturer, entered the market in October 2003 with its Ngage hybrid phone, which has gaming capability. This may be true, but firms could still arrive at maximum profit by trial and error adjustment of price, or by finding the output where TR and TC are furthest apart. Collusion between oligopolists or price leadership would help, but there will still be a considerable area of uncertainty, especially if the firm faces competition from abroad or from other industries. Game theory may help a firm decide its price and output strategy: it may choose to sacrifice the chance of getting the absolute maximum profit (the high-risk, maximum option), and instead go for the safe strategy of getting probably at least reasonable profits (maximin.) But even this assumes that it knows the consequences for its profits of each of the possible reactions of its rivals. The shareholders are the owners and presumably will want the firm to maximise profits so as to increase their dividends and the value of their shares. The greater the level of expenditure by managers on these items, the greater is likely to be their status, power, prestige, professional excellence and job security, and hence utility. Mobile gaming, a gaming niche dominated by Nintendo and its Gameboy, is also facing new competitive pressure. Having identified the factors that influence a manager's utility, Williamson developed several models in which managers seek to maximise their utility. He used these models to predict managerial behaviour under

various conditions and argued that they performed better than traditional profit-maximising theory. Difficulties in maximising profit One criticism of traditional theory sometimes put forward is that firms do not use MR and MC concepts. More importantly, firms are unlikely to know precisely (or even approximately) their demand curves and hence their AIR curves. Some of these shifts occur as a result of factors outside the firm's control, such as changes in competitors' prices and products, or changes in technology.

**Alternative aims** An even more fundamental attack on the traditional theory of firm is that firms do not even aim to maximise profits (even if they could). Managers will still have to ensure that sufficient profits are made to keep shareholders happy, but that may be very different from maximising profits. The market for game consoles is an interesting one, as it appears to have its own cycle that is quite distinct from the broader economic cycle of the economy. It also increases the player's average age: according to the interactive digital software association, the average American gamer is 28.

**Managerial utility maximisation** One of the most influential of the alternative theories of the firm has been that developed by O.E Williamson<sup>1</sup> in the 1960s. To maximise their own utility, argued Williamson Williamson identified a number of factors that affect a manager's utility. Provided they end up maximising profits, they will be equating MC and AIR, even if they do not know it! In reality, it will not even have this information to any degree of certainty, because it simply will not be able to predict just how consumers will respond to each of its rivals alternative reactions. The firm is not, therefore, faced with static cost and revenue curves from which it can read off its profit-maximising price and output. If it chooses a price and an output that maximise profits this year, it may as a result jeopardise profits in the future. Given these extreme problems in deciding profit-maximising price and out-put, firms may adopt simple rules of thumb for pricing. Directors in turn employ professional managers, who are often given considerable discretion in making decisions. For example, policies to increase the size of the firm or the firm's share of the market may involve heavy advertising or low prices to the detriment of short-run profits. But if this results in the firm becoming larger, with a larger share of the market, the resulting economic power may enable the firm to make larger profits in the long run. A claim by managers that they were attempting to maximise long-run profits could be an excuse for virtually any policy. When challenged as to why the firm had say, undertaken expensive research, or high-cost investment, or engaged in damaging price war, the managers could reply, yes but in the long run it will pay off. Quite apart from this, the actions of competitors, sup-pliers, unions and so on are difficult to predict. In joint second place, and launched at about the same time are Microsoft's Xbox and Nintendo's Game Cube. Console purchases are strongly linked to new console developments, which occur every few years. However, even with such aggressive price-cutting, Xbox's market share has remained largely unaffected. The growth in online gaming is heavily dependent on the development and spread of broadband internet connections. All three companies- Sony, Microsoft and Nintendo- know that, to be successful in the gaming industry, you must look to the long term and constantly seek to innovate. Time period Finally, there is the problem in deciding the time period over which the firm should be seeking to maximise profits. Some, however, change as a direct result of a firm's policies, such as an advertising campaign, the development of a new improved product, or the installation of new equipment. It is reasonable to assume that owners will want to maximise profits: this much most of the critics of the traditional theory accept. In Chapter 3 we saw that

in public limited companies there is generally a separation of ownership and control. They may, for example, pursue higher salaries, greater power or prestige, better working conditions, greater sales, etc. Alternative theories of the firm to those of profit maximisation, therefore, tend to assume that Large firms are profit satisficers. Many actions of firms may be seen to conflict with this aim and yet could be consistent with the aim of long-run profit maximisation. The firm will need a plan of action for prices, output, investment, etc., stretching from now into the future. These shifts in demand and cost curves will be very difficult to estimate with any precision. This would explain why sales of gaming hardware and software continue to expand. The four main ones were salary, job security, dominance (including status, power and prestige) and professional excellence. Sony is set to enter the market in 2004 with its own mobile gaming handset. It would be a poor business strategy not to look to the future in this ever changing market, and so long as competition remains, and products need replacing over a period of time, then long-run profits are likely to be the goal rather than the maximisation of profits over short-run. One important conclusion was that average costs are likely to be higher when managers have the discretion to pursue their own utility. For example, perks and unnecessarily high staffing levels add to costs. In this case, traditional models will still be useful in predicting price and output. Lack of information The main difficulty in trying to maximise profits is a lack of information. Firms may well use accountants' cost concepts not based on opportunity cost. If it is thereby impossible to measure true profit, a firm will not be able to maximise profit except by chance. In order to make even an informed guess about marginal revenue, they must have some idea of how responsive demand will be to a change in price. The biggest problem in estimating the firm's demand curve is in estimating the actions and reactions of other firms and their effects. Also variable costs are likely to decrease if the new equipment is more efficient. The traditional theory of the firm assumes that it is the owners of the firm that make price and output decisions. Shareholders elect directors. Will they want to maximise profits, or will they have some other aim? Managers may be assumed to want to maximise their own utility. Different managers in the same firm may well pursue different aims. That is, managers strive hard for a minimum target level of profit, but are less interested in profits above this level. Even if long-run profit maximisation is the prime aim, the means of achieving it are extremely complex. Often this will simply involve avoiding making decisions (e.g. cutting price) that may, stimulate an unfavourable reaction from rivals (e.g. rivals cutting their price). One example, is the long-running video games war between Sony, Nintendo and, most recently, Microsoft. Older players tend to have more disposable income to spend on games than do teenagers. In 2002 it reached an all-time high in the UK of 2.1m, an 8 per cent increase on the previous year. Product development has also been influenced by this trend towards older gamers. Even given the market's staggering growth, it has proved to be fiercely competitive. Until the next generation of consoles appear in these two market areas are likely to be the Source of most competition between the gaming industry's major players. But how are they to estimate this price elasticity? But even this is frequently very unreliable. Instead it is faced with a changing (and often highly unpredictable) set of curves. If it does, its costs will rise in the short run and thus short-run profits will fall. On the other hand, if the quality of the product thereby increases, demand is likely to increase over the longer run. But what are the objectives of managers? This may well involve pursuits that conflict with profit maximisation. At first sight, a theory of

long-run profit maximisation would seem to be a realistic alternative to the traditional short-run profit-maximisation theory. In practice, however, the theory is not a very useful predictor of firms' behaviour and is very difficult to test. But today's prices and marketing decisions affect tomorrow's demand. Similarly, today's investment decisions affect tomorrow's costs. There are, however, plenty of examples from the world of business to suggest that firms often take a longer-term perspective. The industry is dominated by Sony and its PlayStation 2. Mature-rated games now account for 13 per cent of the American market, up 6 per cent on 2001. The launch price of Microsoft's Xbox in March 2002 was GBP299. Of these only salary is directly measurable. The rest have to be measured indirectly. Let us examine each in turn. Even though (presumably) they will know how much they are selling at the moment, this only gives them one point on their demand curve and no point at all on their MR curve. Firms operate in a changing environment. Demand curves shift; supply curves shift. The firm may be considering whether to invest in new expensive equipment. In other words, long-run profit is likely to increase, but probably by a highly uncertain amount. The question is, however, whether the owners do in fact make the decisions. This is very difficult to refute (until it is too late!). Therefore, future demand curves cannot be taken as given. Therefore, future cost curves cannot be taken as given. Since 2001 they have both sold about 10 million consoles. In addition Each gaming boom is bigger than the last. Children who have grown up with games keep on playing, which expands the market.... Just one year later it was GBP129.99 – a fall of 56 per cent. In other words, they are free to pursue their own interests. And what are the managers' interests? Market research may help. Take a simple example. By the end of 2002 it had .sold over 50 million units since its launch in March 2000