Assessment: model answers

1 German television advertising

(a) There was a decline in its advertising revenue.

(b) A fixed cost is one that does not vary with the volume of output produced by a firm. In contrast, variable costs vary directly with the volume of output produced.

The output of the television company is its television programmes but no matter how many or how few programmes it makes and broadcasts it still be required to pay fixed costs such as rents for studios and offices, the wages of office staff, telephone bills, insurance premiums, any loan repayments and possibly equipment hire charges. Merging a number of departments may have saved some office space and therefore rent and reduced fixed wages, office equipment maintenance and administrative costs. If the company is also now spending less on making new programmes it may also save some variable costs, for example from hiring fewer cameras, actors and costumes.

(c) The broadcaster lost 20% of its advertising revenue which was 90% of its total revenue. It therefore lost 18% (i.e. 20%/90% × 100) of its revenue.

(d) A successful persuasive advertising campaign can create and/or increase a consumer want for a product. As a result, consumer demand for the product will increase at all possible prices because existing consumers of the product want more of it and new consumers are attracted to the product. Producers will benefit from increased sales and possibly also profits if additional revenues exceed the costs of advertising.

In the diagram below this is shown by a shift in the market demand curve for the good to the right, from D1 to D2. At the original equilibrium of market price P1 there is now an excess of demand over the amount supplied and exchanged at Q1. This will put upward pressure on the market price. At P2 market demand is again equal to market supply and Q2 of the product will be traded between consumers and producers.

Informative advertising providing factual information about a product, such as a train timetable and schedule of fares, can also have the same impact on demand because consumers may not have known about the product before and can now make more informed choices.

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(e) If the total revenue of the television company from advertising and other sales exceeds its total costs of production it will earn a profit. The fall in advertising revenue will therefore have reduced profits but it is not clear by how much since the figures provided are in percentages. Similarly, it is not possible to determine by how much profit could rise once the cost measures are undertaken. Total revenue and total cost before and after the cost-saving measures have been taken will need to be quantified.

It will also be sensible to investigate what impact if any the reduction in programme making could have on advertising revenue. There is a risk that if the television station makes fewer new programmes and broadcasts more repeats it may lose viewers. If the television company loses viewers then advertising on its channel will be less effective than before because the audience has shrunk. Firms may look to other more popular channels or other popular media to advertise their products instead. If this is the case the cut in programming will simply reduce revenues and profits further. It will therefore be important to look at other ways the television company could earn revenue and reduce its costs.

For example, the television company could develop more channels with programmes targeted at particular consumer groups, such as cartoon channels for young children, music and fashion for teenagers, and news and documentaries for adults. This will help increase viewer numbers and help other firms target their advertising at these consumer groups. The television company could also sell discs or downloads of its programmes.

Additional cost measures might include making more programmes overseas in countries where wages and other costs may be lower.

2 The computer games industry

(a) The size of an industry in an economy can be measured in a number of ways. First, it could be measured by the total number of people it employs as a proportion of the total workforce. An industry that accounts for a significant proportion of workforce jobs and incomes would be a large industry. Secondly, the size of an industry can be determined by the contribution it makes to total output, i.e. the value of its annual output as a proportion of the total annual output of the economy. A third way to measure the size of an industry is compare it with international rivals in terms of total revenues.

(b) According to the article the Canadian video games industry is third largest in the world by employment, but employment figures for the Japanese and US industries are not provided. It is therefore not possible to say how large or small the Canadian industry is in comparison. Similarly, a comparison with other Canadian industries is not possible using data from the article alone. In terms of contribution to total employment and output the Canadian games industry may be one of Canada’s smallest industries despite being one of the top three in the global video games market.

(c) Specialization involves focusing use of resources on a narrow set of productive activities they are best equipped to undertake, or most efficient at. For example, most employees will specialize in those occupations in which they are the most skilled and most productive. In much the same way, entire economies will specialize in those industries best suited to their resources.

(d) The article suggests the US, Japan and Canada have a comparative advantage in the production of video games compared with other countries. It also reports Canada is devoting more resources, notably labour, to their production.
(e) Rather than producing a wide range of different products, most firms concentrate their resources on the production of just one good or service. This specialization allows a firm to combine its resources in the most efficient way possible to maximize its productivity and minimize unit costs. The firm and its resources will also develop their expertise further over time if they concentrate on the processes involved in producing the chosen product. Product quality and prices should therefore be more attractive to consumers who may in turn develop brand loyalty to the product and producer.

Specialization therefore allows a firm to build scale in the production of one product rather than producing a smaller number of units for each product in a wide range of different items. In so doing a firm, if large enough, should enjoy economies of scale in production. For example, a large firm may have access to more and cheaper sources of finance for its business operations. Interest charges on loans may be below those offered to smaller firms, or if the supermarket is a limited company it can sell shares to raise finance.

A large firm may also be able to buy components, equipment and other goods or services it needs for production in bulk from suppliers at discounted prices. It can also spread its advertising costs over a much larger output and customer base compared to a smaller enterprise.

However, specialization and large size may cause problems for firms. For example, focusing on the production of just one product can be risky. If consumer tastes change and demand for the product falls the firm will lose significant sales and profits. It may even be forced to close. By producing a range of different products for different markets, a firm can protect itself from a reduction in demand for any one of those products. This is called diversification. This is also a sensible strategy for a firm if it is finding it difficult to attract new customers to grow its revenue because the product it specializes in is too standardized and has outgrown its market.

A firm that grows too much and too quickly may also experience problems called diseconomies of scale which result in rising costs and production problems. For example, managing a large firm can be difficult, especially if the firm has factories or offices spread over many different locations with many different layers of management. This can cause communication breakdowns and disagreements between different managers in different parts of the organization and at different levels in the management hierarchy. Some large firms may also be unable to attract enough workers with the right skills. Their costs may rise as they have to spend more money on training their workers and increasing their wages to ensure they do not leave to take jobs in other firms.

Large firms may also automate their production processes using computer-controlled equipment and machines to mass-produce their product. Workers operating the machinery may become bored undertaking repetitive tasks. They may become de-motivated and less cooperative. Disputes and strikes may occur if workers feel poorly treated. Shortages of supplies could also disrupt mass production.

3

(a) Horizontal integration involves a merger or takeover of firms engaged in the production of the same type of good or service, for example the merger of two car manufacturers. Most integration between firms is of this type. This type of integration may provide a number of economies of scale, for example the employment of more specialized machines and labour, the spreading of administration costs and bulk buying.
Vertical integration occurs between firms at different stages of production. For example, a car manufacturer may combine with a chain of car retailers. This involves forward integration. In this way the car manufacturer can be certain it has showroomss at which it can promote and sell its cars. Backward integration can also occur. For example, a food processing company may combine with a farm so that it is guaranteed supplies of crops or meat.

(b) A partnership is a legal agreement between two or more people, usually no more than 20, to jointly own, finance and run a business, and to share any profits. Partnerships are popular business organizations among professionals including solicitors, doctors, accountants and veterinary surgeons. Most partnerships are small businesses serving local markets.

To raise additional finance a partnership may take on more partners. Most partners are general partners who have an unlimited liability to repay business debts if the partnership fails. However, it is also possible to have some limited partners with limited liability. A silent partner or sleeping partner will provide money to the partnership in return for a share of the profits, but will not be involved in the management of the organization.

In contrast, a public limited company has at least two shareholders and can sell shares to any individual or organization on the stock market through a stock exchange or bourse. Because public limited companies are able to raise significant capital in this way they are some of the largest and most successful business organizations in the world. Many are internationally recognized multinational corporations with operations in many different countries.

A limited company or corporation is a separate legal body from its owners. This means all its owners, or shareholders, have limited liability, the company can be taxed on its income separately from its owners, and it is able to own assets, buy shares in other companies and borrow money in its own right.

Shareholders seldom have any management responsibilities except perhaps in the smallest of companies where there are owner-managers. Instead, the shareholders of a company will elect a board of directors at an annual general meeting to manage the organization on a day-to-day basis.

(Other types of private sector organization include sole trader and private limited company.)

(c) Through growth a firm is able to enjoy a number of cost advantages over smaller firms. When a firm expands its scale of production it has a chance to become more efficient. Average or unit costs of production can be reduced as a firm grows in scale because it gives the management or owners a chance to reorganize the way the firm is run and financed. Cost savings that result from increasing the scale of production are called economies of scale and will allow firms to increase their profits.

For example, large firms are often able to buy the materials, components and other supplies they need in bulk because of the large scale of their production. Suppliers will usually offer price discounts for bulk purchases because it is cheaper for them to make one large delivery than several smaller deliveries.

Larger firms are also able to borrow more money and at lower interest rates than smaller businesses. Bank managers and other lenders often consider lending to big organizations as less risky than lending to smaller ones. This is because large firms are often more financially secure and can offer more assets, including property and other investments, they can use as collateral against loans. Larger firms may also be able to form a limited company and sell shares to raise non-repayable share capital.
With more financial resources than smaller firms a large enterprise can invest in specialized machinery and equipment, to train and recruit highly skilled workers, and to research and develop new products and processes to increase the efficiency of their production. They can also diversify into other products and markets. In this way a large firm is able to reduce the risk to its business of losing a major customer, or a fall in demand for one its products in one of its markets.

Large firms can pass on some of these cost savings to their customers as lower prices, and because they can invest in developing new and improved products and in improved customer service levels, consumers can also gain from wider product choice and quality. However, growth in the size of firms may not always benefit consumers or their owners. This is because some firms can experience problems if they try to expand their size and scale of production too much and too quickly. As a result, productivity may fall and average costs will rise. These problems are caused by diseconomies of scale. These occur because managing a large firm can be difficult, especially if the firm has factories or offices spread over many different locations producing many different types of products, and with many different layers of management. This can cause communication breakdowns and disagreements between different managers in different parts of the organization and at different levels in the management hierarchy. Some large firms may also be unable to attract enough workers with the right skills. Their costs may rise as they have to spend more money on training their workers and increasing their wages to ensure they do not leave to take jobs in other firms.

If a large firm experiences significant diseconomies of scale it may attempt to pass on these costs to consumers as higher prices. The mass production of standardized products by many large firms also reduces product choice for consumers. Some large firms may also grow to dominate the market supply of a product and may use this market power to restrict new competition so they are able to charge higher prices and earn abnormal profits. Consumers will suffer reduced choice and higher prices as a result of such anti-competitive behaviour.

4

(a) A fixed cost is one that does not vary with the volume of output produced by a firm. For example, fixed costs will include rents, telephone bills, insurance premiums and equipment hire charges. Fixed costs may however increase if a firm expands its scale of production, for example by moving to larger premises and hiring more machinery.

In contrast, variable costs, such as the purchase of component parts and materials and piece-rate payments to workers, vary directly with the volume of output produced.

(b) If flights have been cancelled United Airlines would lose significant revenue but may also be able to save some costs. These will be mainly the variable costs of operating flights such as fuel costs, maintenance costs and any airport charges for landing and handling flights. If some of United Airline’s aircraft were leased rather than owned outright the airline may also have been able to cancel some of its leases. Further, if pilots refused to work overtime these payments will also have been saved. However, the basic salaries of flight crews and cabin staff would not be saved as these will need to be paid whether or not flights were operated. Similarly, the disruption is unlikely to have affected other fixed costs such as costs of operating offices and aircraft hangars, loan repayments and insurance premiums.
Some variable costs could however increase. For example, costs of rebooking customers onto different flights, costs of investigating and correcting technical problems and increased marketing in an attempt to attract customers back to using the airline following the disruption.

(c) Profit is the surplus of total revenue from the sale of products left over after the total cost of producing those same products has been deducted. Most private sector firms aim to maximize their profit by attempting to boost their revenues while minimizing their production costs. Profit is the reward for risk taking in business.

(d) The cancellation of flights over an extended period will clearly lose the airline a significant amount of revenue. If costs are unchanged, profits will fall. However, from the answer to part (b) above costs are unlikely to have remained constant, but it is not clear if overall they will have fallen or increased. Fixed costs of owning and operating aircraft are likely to be a major element in total cost and will be largely unaffected by the disruption. Likely savings in variable costs, such as on fuel, maintenance and crew overtime may be significant but may be offset by increases in variable costs associated with rebooking customers onto alternative flights operated by other airlines and increased marketing costs. The outcome in terms of profits is therefore unclear but on balance I would expect there to be a reasonably big drop in profits as the loss in ticket revenues is likely to far exceed any decrease in costs.