Competitive marketing

Business, Marketing

" An Economy in which people selfishly pursue their own objectives could never achieve the objectives of a fair society" - " Competitive markets are efficient, so we should not attempt to change them" Provide a critique of these statements. Introduction At first sight, it seems like these two statements are almost exact opposites - the first advocates intervention to correct the decisions that individual economic agents make, whilst the second promotes the traditional laissez-faire approach of non-intervention. However, there are significant differences in the possible interpretations of the two statements.

The first refers to people pursuing their own objectives - this could be an individual, small agent in perfect competition, or it could be one company in a monopoly market whilst the second talks specifically of competitive markets. The first statement talks of " the objectives of a fair society" whilst the second concerns itself with efficiency. To provide a critique of these statements, I will first start off by considering a number of concepts - concerned with what happens when agents attempt to maximise their own welfare, before deciding what relevance these have to the validity of the statements.

What equilibrium is achieved when we use the simplest possible model? - a pure exchange economy A pure exchange economy is an economy with no production - each agent starts with an endowment of goods that they can then trade. In order to build a useful model, we will limit ourselves to two consumers - A and B, and two goods - good 1 and good 2. Both start with an endowment - consumer A with ? A = (? A1,? A2) and consumer B with ? B = (? B1,? B2). Both will end up with a final allocation of goods xA and xB.

The first condition that we assume is that consumers cannot consume more than there is or a particular good. I. e. the final allocations of each good cannot add up to more than the sum of the endowments for each good. More mathematically: xA1 + xB1 A1 + B1 and xA2 + xB2 A2 + B2 This gives helps to reinforce the notion that in this economy there is a total amount available for consumption - if consumer A consumes more, then it is at the expense of consumer B's consumption.

We can summarise the information using an Edgeworth box - a plane that shows all the possible allocations of good 1 and 2 such that the allocation fulfils the above inequality. We draw consumer A's goods from the bottom left, and consumer B's from the top right: The total width of the box is A1 + B1 (The total amount of good 1) and the height is A2 + B2 (The total amount of good 2). Any allocation within the box is a feasible allocation as the quantity consumed of each good is equal to the total amount available.

We can now extend the use of the Edgeworth box to include preferences, remembering that the axes " belonging" to player B start from the top right hand corner. Figure 2 shows an Edgeworth box with some of each consumer's indifference curves shown. There are a number of assumptions displayed in figure 2 which need explaining. Firstly, the preferences are (as always) monotonic and convex. This may not be the case, but it is required for the maths later. Secondly, the indifference curves of consumers A and B cross once and only once (i. e.

they share the same tangent line) at the point labelled " Final allocation". This will be explained later. We define a Pareto efficient allocation as an allocation where it is impossible to make anyone better off without making another person worse off. Now consider the initial allocation point. We can move along consumer A's indifference curve to point L without changing consumer A's utility - but we can see that this has pushed us on to an indifference curve which is further out for B. We have made someone better off without making anyone else worse off.

We can do this again - move along B's indifference curve until we reach the " Final allocation" point. When we reach this point we cannot increase the utility of either consumer without making the other worse off. Trade will no longer be mutually beneficial. This point is therefore Pareto efficient. The theory that in the case of a pure exchange economy, a competitive equilibrium is Pareto efficient, is known as the First Theorem of Welfare Economics. What happens if we look at the situation the other way round? If we have a Pareto efficient allocation, will there be prices such that it is a market equilibrium?

Yes - we can use an Edgeworth box as before. This is shown in figure 3. If we are in pareto equilibrium, we must be unable to make one person better off without making the other worse off. The only way this can be so is if the indifference curves touch at the Pareto efficient allocation. Otherwise we could move a little way up or down one of the indifference curves and give one player more whilst leaving the other's utility unchanged. This is known as the Second Welfare Theory of Economics - a Pareto efficient allocation is an equilibrium for some set of prices.

This implies that the government is free to transfer endowments around - so long as the initial endowment lies on the line that separates the two indifference curves, a Pareto efficient equilibrium will result. Figure 4 depicts a general equilibrium. The budget line must pass through the initial allocation (It defines the total amount available, and each consumer could afford the initial allocation), and it also passes through the Pareto optimal position (Each consumer can afford this and as we assume consumers will be spending more than less, they will still be spending all income).

Both consumers are maximising their utility given the budget constraint and the market is clearing. From the definition of the final endowment (Where the indifference curves cross) and the way we have defined the budget line (It crosses the final endowment) we can say that this equilibrium is pareto efficient - if the budget line just crosses each one of the indifference curves once then it is a tangent to both, and as such the slope of the budget line (-p1/p2), and the slopes of the two indifference curves (The marginal rate of substitution for each consumer) are equal.

If the price ratio is equal to the rate at which the consumers will substitute one good for another, then it is impossible to make a change in allocation that will make both consumers happier. We can extend this analysis to a situation where production takes place. Consider the simplest possible case - one consumer, one producer and one good. We can even make the consumer and the producer the same person. This is known as the " Robinson Crusoe" economy. Assume Robinson has a choice of " producing" coconuts, or consuming leisure.

We can assume diminishing returns to scale (I. e. the more time he spends picking coconuts, the less he can pick in an hour due to fatigue). Thus he will have a production function as depicted in figure 5. He will pay himself wage w. The price of coconuts can be set as the numeraire (equal to 1). Profit will equal total revenue - total costs (as usual), i. e. : = C- wL The only costs Robinson incurs are the wages he must pay himself.

Happily, his total available money to spend on coconuts will be the money he makes from selling them: i. e. the profit. Thus the budget line will be the same as the isoprofit line. Leisure supply can be derived from leisure demand. We can draw all this on one diagram as shown in figure 5 (although we must be careful and ensure the right slopes are used!): Robinson the firm maximises profit by pushing the isoprofit line upwards until it becomes tangent to the production function in the usual way. The consumer maximises utility by pushing the indifference curve upwards until it hits the budget line.

The slope of the budget line is w. At the optimal point, because the budget line is tangent to both the isoprofit line and the indifference curve, and because we are in a closed economy (I. e. production = consumption), then all the curves meet at a common, general equilibrium point. Both the firm and the consumer are optimising their respective goals (Profit and utility) and as such no change could make one better off without making the other worse off. I. e. we are in a Pareto optimal situation.