

Fax (01524) 381454 E-Mail G. Steele@lancaster. ac.uk Telephone (01524) 594210

WHAT IS OPPORTUNITY COST? 5/99

G.R. Steele

Q: What is opportunity cost?

A: It is the reason 'there is no such thing as a free lunch?'

Q: Free lunch?

A: A commonly used expression, which I thought you might know.

Q: Not so.

A: Never mind. There is no 'free lunch' because every activity uses up resources of some kind and someone must pay.

Q: Are there no free resources?

A: Sand is used in glass-making but, in the Sahara - where it is freely available - sand is useless. Sand becomes an economic resource only when certain costs have been incurred; for example, in transporting sand and in removing any impurities.

Q: But if there were resources which were absolutely free ...

A: then, having no market value, they would require no economic consideration. Economics would be irrelevant. An economic resource is one which is valuable, because it has competing uses.

Q: Competition between potential users determines its value?

A: Yes.

Q: So the opportunity cost of a resource is determine by its market price?

A: No. Not all resources are traded, and even if they were the answer would still be no.

Q: Why?

A: Opportunity cost is a personal consideration.

Q: Please explain.

A: Suppose that you and I undertake the exact same activity.

Q: Like what?

A: Anything ... going to the theatre, for example.

Q: If we do the same thing, surely the cost is the same. We would pay the same ticket price, the same programme price, the same box of chocolates price ...

A: ... this is a good example. We pay the same prices, but it is most unlikely that we incur the same opportunity costs.

Q: Where is the difference?

A: With every activity, opportunities are foregone. In going to the theatre, we use money to exercise command over resources: the service of actors, the production of programmes and the manufacture of chocolates. When we make those choices, we give up the opportunity to apply our time and money elsewhere.

Q: So where is the 'opportunity cost'?

A: The most valuable of all the feasible *alternative* opportunities that are known to us (and which we give up in preference for the theatre) is the 'opportunity cost' of our chosen activity.

Q: But why aren't foregone opportunities measured by market prices?

A: Market prices are relevant; but, in addition to the alternative use of the money spent on the ticket, programme, chocolates, *etc.*, we must consider the alternative use of our time.

Q: Let's deal with the actual amount spent. That element is common.

A: Yes.

Q: So that part of opportunity cost - the money spent - is the same.

A: No! In a competitive market, customers pay the same price for the same item; but the value which each individual places upon his purchase is, generally speaking, different.

Q: I can't see what you are getting at.

A: If the ticket price were raised, some (but not all) customers might decide to do something else.

Q: Undoubtedly.

A: It follows that those who are willing to pay the higher price must place a higher value on the activity than those who are deterred by the higher price.

Q: Yes. I see that. Even though they all pay the same price, the subjective valuation of a visit to the theatre varies for different individuals?

A: Correct. Individuals for whom the value of the item is greater than its price are said to enjoy a 'consumer surplus'. But the same consideration applies to a single customer.

Q: I don't follow.

A: Consider the chocolates bought at the theatre. Do you buy one, two or three boxes?

Q: Two. A third might make me sick.

A: Right. The price of each box is the same, but you value the first and second more highly than a third, because you wish to avoid feeling sick!

Q: I see. The more I have, the less I value another.

A: Arguably that is generally the case. The tendency is to value the first item more highly than the second; the second more highly than the third, and so on.

Q: The more you have the less valuable each item becomes.

A: Economists call that 'diminishing marginal utility'.

Q: They can call it what they like. But are you implying that the market price is irrelevant to opportunity cost?

A: No. The price is not irrelevant. It tells us the value which is placed upon the last unit (say, the last box of chocolates) which is bought. The value of any unit purchased ahead of this last unit is generally higher, for the reasons we have just discussed.

Q: Let's move on to the second element: the opportunity cost of the time which is taken up by an activity.

A: Here, the differences between individuals must be obvious. Different kinds of costly sacrifices (or none) might be made in order to attend the performance.

Q: And how do economists categorise that?

A: Economists refer to 'consumer preferences': consumers' tastes and their scale of preferences are reflected in their subjective valuation of the opportunity cost of time spent in an activity.

Q: So, opportunity cost comprises two elements: the market prices of resources used up by the activity provide a minimum valuation of the first element; and the subjective valuation of the time taken up by the activity gives the second element.

A: That's good.

Q: Of what practical use is this concept?

A: It is a useful antidote to accountancy costs.

Q: Do you disparage accountancy?

A: Not at all. Please don't misunderstand me. An accountant works within conventions and legal requirements and his documentation may be the only consistent basis for historical cost comparisons.

Q: I'm beginning to sense that there are important differences between accountancy cost and opportunity cost.

A: That is indeed the case. The accountant's remit is to provide a picture of the past: a record which, because it is structured on the basis of agreed conventions and legal requirements, is widely understood.

Q: If you are an accountant!

A: It most certainly helps.

Q: So, when is economics relevant?

A: Unlike the accountant's record of past events, opportunity cost relates to actions whose effects only show later.

Q: Sorry?

A: Opportunity cost is measured by a hypothetical alternative which is rejected in favour of a different course of action. Such considerations are speculative when the decision is made.

Q: An economic evaluation rests on the future consequences of alternative decisions?

A: That's correct. A rational economic choice between alternative possibilities requires a comparison between the hypothetical consequences both of the option chosen and of the options discarded.

Q: There seem to be two requirements: knowledge of the possibilities and knowledge of the consequences.

A: Indeed, those are the two vital elements: an alertness to the possibilities and an appreciation of the consequences.

Q: Surely, this implies a large element of foresight.

A: Foresight is essential.

Q: And hindsight as well.

A: What are you thinking of?

Q: I was thinking about how share-holders might form a judgement about a company's performance.

A: This is another good example. Go on.

Q: The implication of our discussion is that company accounts are of little use in judging the performance of managers and directors?

A: You are very perceptive. That *is* the implication. Managerial decisions need to be evaluated on the basis of choices *as they appeared at the time decisions were made*. These are not - nor could they be - placed on record. Alternatives which are discarded generate no data for the accountants to record.

Q: Then how can we make such appraisals? How can we make judgements about the opportunity cost of business decisions?

A: We must resort to indirect means. Our only practical option is to ensure that our institutions and procedures reward alertness and initiative and penalise dullness.

Q: Carrots and sticks?

A: Exactly

Q: What have you in mind?

A: Nothing concentrates minds like competition: the lure of sweet success set against the bitterness of failure.

Q: You place great store upon the competitive process.

A: The *raison d'être* of competition is that it minimises opportunity costs.

Q: It minimises something that cannot be measured?

A: It is often the case that important considerations defy measurement; but that does not leave us ignorant of the institutional arrangements which are vital to the attainment of economic goals. Competition indicates who serves us the best by eliminating those whose performance is inferior.

Q: That sounds very harsh.

A: Indeed, it can be very harsh. The price of economic progress can be high; but so, too, are the costs of stagnation.

Q: Can we stop there?

A: Perhaps we should.