The theory of consumer behavior economics essay

Indeed we will see that the choice of a consumer both depends on his preferences and on his limited income. We begin our analysis by describing consumer's tastes; we then introduce the budget line, which shows the fact that consumers face budget constraints; finally, given those two points, we will be able to understand how people allocate their income among all the products available, in order to maximize their well-being.

We begin by speaking about assumptions that economists made about consumer's tastes.

First of all, economists assume that all consumers have preferences. They are all able to compare and then set a ranking of all consumption possibilities, according to the value they expect to get from it. That is, a consumer can decide which one of the market basket of goods is better for him than the other, or else determine that he is indifferent between the two. We use the term market basket to refer to a fixed list of items. This can also be called a bundle.

In addition, economists assume that if one person prefers a basket A to a basket B, and that if he prefers a basket B to a basket C, then he must prefer basket A to basket C. This assumption is known as transitivity.

They also admit that a consumer always prefers more to less and that consumers are never satiated. This is called the non-satiation assumption.

Consumer's preferences can be described graphically by drawing a graph known as indifference curve.

An indifference curve indicates all market baskets for which the consumer is indifferent; that means that he gets the same satisfaction, or utility, for all market baskets located on this curve.

Let us take an example to better understand it.

In the figure below, we draw on the horizontal axis the consumer's consumption of good X, sweet, and on the vertical axis the consumer's consumption of good Y, chocolate.

Figure

Here the consumer is as happy to have 1 pizza and 4 Hamburgers as to have 2 pizzas and 2 Hamburgers.

An indifference curve has two basic characteristics:

– It cannot cross another indifference curve; otherwise the non-satiation assumption would be violated.

Figure

– Moreover, an indifference curve has always a negative slope. This is still because of the assumption that more is preferred than less. Indeed, if the slope were positive, that means that a point C (cf figure above) could be on the same indifference curve. But because of the assumption, the consumer mustn't be indifferent between the two because basket C contains more goods than basket A.

Now let's see the economic interpretation of the slope of an indifference curve.

Figure

The slope of the indifference curve is: ΔC/ΔS, where ΔS and ΔC respectively represent the change in the consumption of sweets and chocolates.

This ratio tells us the rate at which the consumer is willing to substitute sweet for chocolate, in order to let his satisfaction unchanged. This rate is called the marginal rate of substitution (MRS). This can be interpreted as how much the consumer is willing to give up of chocolate to acquire more of sweet.

Thus we have Δy/Δx = MRS.

In the example, from point A to point B the consumer gives up 6 units of chocolates in exchange for one more unit of sweet, without changing his satisfaction.

The slope of the indifference curve decreases as we increase the consumption of sweets. Thus there is a diminishing marginal rate of substitution. Indifference curves with this property are said to be convex.

However, whereas consumers have preferences and they always prefer more to less, they can't afford to buy all the things that they want. Consumers face a budget constraint which limits their consumptions' choices.

To analyze how consumer's choices are limited by budget constraints, we can draw a budget line; this is a straight line where the sum of all consumer's expenditures is equal to his income.

The equation of our consumer's budget line is: Ps S + Pc C = I, where S and C are respectively equal to the quantities of sweets and chocolates consumed; Ps and Pc the prices of the two goods and I is the limited income of the consumer.

Suppose that the consumer earns £100 per month and allocates it in the consumption of sweets and chocolates, which cost respectively £1 and £2 each.

Figure

The hatched area shows all combinations of goods that the consumer can afford (A and B for example). Yet, the limited income of the consumer doesn't allow him to have access to the market basket C.

The intercept I/Ps and I/Pc represent respectively the quantity of sweet and the quantity of chocolate that he can buy if he spends all his income on the two goods.

The slope of the budget line gives us the rate of substitution of one unit for another, while keeping his amount of expenditure constant. Here the price of sweet is £1 and the price of chocolate is £2. So the consumer needs to sacrifice 2/1= 2 units of chocolate to get one more unit of sweet.

As we said in the introduction, each consumer wants to select goods that give him the maximum satisfaction among those which are affordable.

Thus to see how consumers make their optimal choices, we put together the budget line and the indifference curve.

Let's look at the figure below, where several consumer's indifference curves and his budget line are represented.

Figure

We can forget about the indifference curves below the budget line, like I1, because some income is not used and the consumer can still increase his utility by increasing his expenditure in goods.

Moreover, all market baskets located above the budget line are not affordable.

The only point affordable which will provide the highest utility level is the point B, on the highest indifference curve he can reach. The quantities of each good associated are S1 and C1.

Thus the optimal consumption of goods is where the indifference curve is tangent to the budget line. At the point of tangency, the slope of the indifference curve is equal to the slope of the budget line. As a result, at the point of the optimal choice, MRScs = Ps/Pc.

This means that at this point, the rate at which the consumer is willing to substitute sweet for chocolate is equal to the rate at which the consumer can

substitute sweet for chocolate while keeping his total of expenditure constant.

However, there are some exceptional cases for which at the optimal point, the marginal rate of substitution for one good is not equal to the price ratio. These kinds of cases are called corner solutions.

It is the case when a consumer maximizes his satisfaction by purchasing only one of the two goods with his limited income.

Let's consider this example:

Figure