Value :
Theories of Utility and Maximization of Utility

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What is Capitalism

To discuss about utilities and values, and of maximizing them, one needs to know the background information, namely about capitalism.

Also called free market economy, or free enterprise economy economic system, dominant in the Western world since the breakup of feudalism, in which most of the means of production are privately owned and production is guided and income distributed largely through the operation of markets.

Although the continuous development of capitalism as a system dates only from the 16th century, antecedents of capitalist institution existed in the ancient world, and flourishing pockets of capitalism were present during the later European Middle Ages. The development of capitalism was spearheaded by the growth of the English cloth industry during the 16th, 17th, and 18th centuries. The feature of this development that distinguished capitalism from previous systems was the use of the excess of production over consumption to enlarge productive capacity rather than to invest in economically unproductive enterprises, such as pyramids and cathedrals. This characteristic was encouraged by several historical events.

In the ethic encouraged by the Protestant Reformation of the 16th century, traditional disdain for acquisitive effort was diminished, while hard work and frugality were given a stronger religious sanction. Economic inequality was justified on the grounds that the wealthy were also the virtuous.

Another contributing factor was the increase in Europe's supply of precious metals and the resulting inflation in prices. Wages did not rise as fast as prices in this period, and the main beneficiaries of the inflation were the capitalists. The early capitalists also enjoyed the benefits of the rise of strong national states during the mercantilist era. The policies of national power followed by these states succeeded in providing the basic social conditions, such as uniform monetary systems and legal codes, necessary for economic development and eventually made possible the shift from public to private initiative.

Beginning in the 18th century in England, the focus of capitalist development shifted from commerce to industry. The steady capital accumulation of the preceding centuries was invested in the practical application of technical knowledge during the Industrial Revolution. The ideology of classical capitalism was expressed in Adam Smith's Inquiry into the Nature and Causes of the Wealth of Nations (1776), which recommended leaving economic decisions to the free play of self-regulating market forces. After the French Revolution and the Napoleonic Wars had swept the remnants of feudalism into oblivion, Smith's policies were increasingly put into practice. The policies of 19th century political liberalism included free trade, sound money (the gold standard), balanced budgets, and minimum levels of poor relief.

World War Ⅰ marked a turning point in the development of capitalism. After the war, international markets shrank, the gold standard was abandoned in favour of managed national multiplied. The Great Depression of the 1930s brought the policy of laissez-faire (noninterference by the state in economic matters) to and end in most countries and for a time cast doubt on the capitalist system as a whole. The performance of capitalism since World War Ⅱ in the United States, the United Kingdom, West Germany, and Japan, however, has given evidence of its continued vitality.

The Definition, and History of Utility

Definition

There are two sides to the analysis of price and value: the supply side and the demand side. If cost can be said to underlie the supply relationship that determines price, the demand side must be takes to reflect consumer tastes and preferences. "Utility" is a concept that has been used to describe these tastes. Basically, it's the happiness or satisfaction a person receives from consuming a product or service.

History

To discuss about the development of theories of utility, one must first look at the development of value theory, since the two have intimate relationship, to the point that utility theory is included in the value theory.

Modern value theory began with Adam Smith, David Ricardo, and a number of other writers, who are generally grouped together as the classical school. These writers sought to explain pricing primarily on the basis of cost of production. That is, if commodity A costs twice as much to produce as commodity B, the price of A will be pushed toward a level twice as high as that of B. If this were not the case, if, for example, A sold for three times the price of B, then the greater profitability of investment in A would cause its production to increase and drive down its price, while the production of B would decline, thus raisin its price. Prices would finally be driven to the 2:1 ratio of the costs of production.

The classical economists were well aware of the oversimplification in this explanation, but, as with most theoretical analysis, its strength lay in the amount it was able to explain with a very simple model. (It is highly misleading to interpret the classical analysis literally, as a picture of its authors' views of the complex world of reality.) It was soon recognized, however, that the cost-of-production analysis considered only part of the relevant problem. Since cost depends on the quantity produced (e.g., costs per unit may decline as production of an item increases), the analysis must take into account the demand for the product. The analysis of demand was made possible must take into account the demand for the product. The analysis of demand was made possible by the theory of utility, developed by H.H. Gossen in Germany, Karl Menger in Austria, Leon Warlas in France, and W.S. Jevons in England.

Utility Theory

Key Ideas

1. Utility is defined by economists as the happiness or satisfaction a person receives from consuming a product or service.
2. Economists use utility theory to derive individual demand curves.
3. Marginal utility is interpreted as the additional happiness a person receives from the consumption of one additional unit of a particular product.
4. The law of diminishing marginal utility is used to explain why there is an inverse relationship between price and quantity demanded.
5. A person is said to be in a state of consumer equilibrium when the marginal utility per dollar spent on product A is equal to the marginal utility per dollar spent on product B.
6. The market price of a non-necessity may be higher than the price of a necessity if the marginal utility of the non-necessity is higher than the marginal utility of the necessity.

Quick Summary

Underlying the idea of an individual's demand curve is the idea that a person will choose how many units to consume of a product given the price of the product. The act of making this choice incorporates a decision process which compares the marginal benefit of consuming a unit of one good with the marginal benefit of consuming another unit of any other good available. The objective of the consumer is to maximize the total benefits received from the consumption of goods and services subject to the limits of the consumer's budget.

Economists call the happiness or satisfaction received from the consumption of goods and services, utility. Utility is measured on an ordinal scale. This implies that every individual may measure utility (happiness) in a way which is different from all other individuals. The consequence of this is that we cannot compare two individuals on the basis of their utility (an interpersonal utility comparison). A single unit of utility is called a util. Total utility is the number of utils received by an individual from all of the consumption of a particular good or service. For example, the total utility that the cookie monster (a character from the children's show Sesame Street) receives from eating 25 cookies may be 500 utils. If he eats one more cookie his total utility may increase to 550 utils. In this case we say his marginal utility (the change in happiness which results from one more unit of consumption) is 50 utils.

The law of diminishing marginal utility refers to the idea that as additional units of a product are consumed the marginal utility will eventually begin to decline. Imagine how good that first glass of water tastes on a hot day after working outside for several hours. Consuming an additional glass of water will increase total utility received from water consumption, but the increase will probably be less than the marginal utility received from the first glass of water consumed.

A consumer's choices are constrained by the amount of money that is available to spend. We call this the budget constraint. In order to maximize total utility, the consumer may study all the different combinations of goods and services that he or she can afford to purchase and then choose the combination which yields the highest total utility. Alternatively, the consumer may compute the marginal utility that could be achieved from each of several products and then choose to consume the product which provides the greatest marginal utility for the least cost. In other words, the consumer compares the marginal utility per dollar spent on each product and then chooses to consume the product which provides him or her with the greatest bang per buck. Total utility is maximized when the marginal utility per dollar spent is equal between all the different products that could be consumed. This state of equality is called consumer equilibrium.

A demand curve can be derived by use of the consumer equilibrium idea. By definition, a demand curve represents the quantities demanded for a range of corresponding prices. For each price, the quantity demanded can be found by finding the quantity which results in consumer equilibrium. The quantity which results in consumer equilibrium is the quantity demanded because it is the quantity which maximizes total utility (happiness).

Consumer surplus is the difference between the highest price a consumer is willing to pay for a product and the price they actually pay. Total consumer surplus is graphically represented by the triangular area below the demand curve and above the equilibrium price line (assuming the consumer pays the equilibrium market price).

The diamond-water paradox revolves around the question why water which is necessary to our existence is so cheap and diamonds which are not necessary to our existence are so expensive. The answer lies in the idea that the marginal utility of the next glass of water is small in comparison to the marginal utility of the next diamond.

The Function of Utility Theory

There are two sides to the analysis of price and value: the supply side and the demand side. If cost can be said to underlie the supply relationship that determines price, the demand side must be taken to reflect consumer tastes and preferences. "Utility" is a concept that has been used to describe these tastes. However, the cost-of-production analysis of value given above is incomplete, because cost itself depends on the quantity produced. The cost analysis, moreover, applies only to commodities the production of which can be expanded and contracted. The price of a firs-folio Shakespeare has no relation to cost of production; it must depend in some sense on its utility to purchasers as it affects their bids.

<u>The Development of Theory of Marginal Utility</u>

The classical economists suggested that this leads to a paradox. They argued that utility could not explain the relative price of fine jade and bread, because the latter was for many consumers essential to life, and hence its utility must surely be greater than that of jade. Yet the price of bread is far lower than that of jade. The theory for marginal utility that flowered toward the end of the 19th century supplied the key to the paradox and provided the basis for today's analysis of demand. Marginal utility was defined as the value to the consumer of an additional unit of some commodity. If, for example, the consumer is offered a choice between 22 and 23 slices of bread for his family, marginal utility measures how much more valuable 23 slices are than 22. It is clear that the magnitude of the marginal utility varies with the magnitude of, say, the smaller of the alternatives. That is, for a family of four, the difference between seven and eight slices of bread per day can be substantial, if the family will still be hungry in either case. But the difference in value between 31 and 32 slices may be negligible. If 31 slices offer enough for everyone to fill his stomach, a 23nd slice may be worth very little. Moreover, the difference in value between 122 and 123 slices may be negative? A 123rd slice may just add to the family's disposal problem. These observations lead directly to the plausible notion that marginal utility in some sense diminishes with the base from which one starts the calculation. With only seven or eight slices the marginal utility (incremental value) of an eight slice is high. With 31 or 32 slices it is lower, and so on. The less scarce a commodity, the lower is its marginal utility, because its possessor in any case will have enough to satisfy his most pressing uses for it, and an increment in his holdings will only permit him to satisfy, in addition, desires of lower priority.

The consumer will be motivated to adjust his purchases so that the price of each and every good will be approximately equal to its marginal utility (that is, to the amount of money he is willing to pay for and additional unit). If the price of and item is P dollars,
for example, and the consumer is considering buying, say, 10 units, at which point the marginal utility of the good to him is M (which is greater than P), the consumer will be better off if he purchases 11 rather 10 units, since the addition unit costs him P dollars. He will keep revising his purchase plans upward until he reaches the point where the marginal utility of the item falls to P dollars. In sum, the consumer's self-interest will lead him (without conscious calculation) to purchase an amount such that the marginal utility is as close as possible to market price. So long as the consumer selects a bundle of purchases that gives him the most benefit (pleasure, utility) for his money, he must end up with quantities such that the marginal utility of each commodity in the bundle is approximately equal to its price

It now becomes easy to explain the paradox underlying the relationship between the prices of jade and bread. Because a piece of fine jade is scarce, its marginal utility is high, and consumers are willing to pay comparatively high prices for it. The explanation is perfectly consist with a utility analysis of demand, so long as one relates price to the marginal utility of the item rather than to its total utility. A family's bread may be very valuable to ti, but, if it has enough, the marginal utility of the bread will be small, and this will be reflected it its low price.

Consumer Theory - Maximization of Utility

Utility maximization with given income is the goal of every households. And there are three theories for utility maximization.

Ⅰ. The Rule of equal marginal return

-Assumption: it is possible to measure the degree of the satisfaction we feel.

A. Total utility and marginal utility

ⅰ. Definition of TU & MU

1. Total utility

Total amount of satisfaction derived from the consumption of a product or combination of products.

2. Marginal utility

The extra utility a consumer obtains from the consumption of one additional unit of a good or service: equal to the change in total utility divided by the change in the quantity consumed

ⅱ. The law of diminishing marginal utility

This law is that as a consumer increases the consumption of a good or service the marginal utility obtained from each additional unit of the good or service decreases.

B. Utility maximization

-Utility maximization occurs when the marginal utility of each product is equal and that is within the budget constraint (budget line).

ⅰ. The rule of equal marginal return

This rule means the total utility is maximized when the marginal utility of each product is equal. For example, when the marginal utility of A product is bigger than B product, we can increase the total utility, buying A product more and B product less. That is the basis of this theory

ⅱ. Budget constraint, line

Budget constraint is the different combination of two products, a consumer can purchase with a specific money income given the product prices.

Ⅱ. Indifference curve

A. Indifference curve

Indifference curve is the different combination of two products which give a consumer same satisfaction or utility.

B. Utility maximization

It occurs when the consumer selects the combination, which reaches the highest attainable indifference durve.

Max Weber and his ideas

On Webers work The Protestant Ethic and Spirit of Capitalism

Introduction
Max Weber (1864～1920) conceived of sociology as a comprehensive science of social action. Webers primary focus was on the subjective meanings that human actors attach to their actions in their mutual orientations within specific social-historical contexts. Behavior devoid of such meaning, Weber argued, falls outside th purview of sociology.

Webers concerned with the meaning that people give to their actions allowed him to understand the drift of historical change. He believed that rational action within a system of rational-legal authority is at the heart of modern society.

In His View
Weber was primarily concerned with modern Western society, in which, as he saw it, behavior had come to e dominated increasingly by goal-oriented rationality, whereas in earlier periods it tended to be motivated by tradition, affect or value-oriented rationality. (We can recall that we already talked about four major types of social action) Weber believed that the rationalization of action can only be realized when traditional ways of life are abandoned. Tradition was overpowering in pre-modern societies. Webers task was to uncover the forces in the West that caused people to abandon their traditional religious value orientation and encouraged them to develop a desire for acquiring goods and wealth.

After careful study, Weber came to the belief that the protestant ethic broke the hold of tradition while it encouraged men to apply themselves rationally to their work. Calvinism, he found, had developed a set of beliefs around the concept of predestination. It was believed by followers of Calvin that one could not do good works or perform acts of faith to assure your place in heaven. You were either among the "elect" (in which case you were in) or you were not. However, wealth was taken as a sign (by you and your neighbors) that you were one of the God's elect, thereby providing encouragement for people to acquire wealth. The protestant ethic therefore provided religious sanctions that fostered a spirit of rigorous discipline, encouraging men to apply themselves rationally to acquire wealth.

Assuming there is a connection between Protestantism and capitalism, how can it be explained? Weber takes issue with along standing interpretation of the Protestant Reformation, which regards it as a decline in the religiousness of the Middle Ages. Protestantism was not a move to secularization, but exactly the opposite, and increase in religious intensity. Protestantism was not a shift toward worldly enjoyment, which was already quite well advanced in the Catholic societies of the Renaissance. The importance of the Reformation, instead, was the impetus Protestantism gave to the combination of piety with business.

On Capitalism
Now Weber introduces a crucial distinction. Capitalism was not invented by the Reformation; it existed in many societies through out medieval and ancient history. There were merchants in ancient Greece, slave markets in Rome, all manner of business enterprise in china and India, merchant caravans in the Islamic world, and merchant guilds which dominated the cities of Italy, Germany, and the Low Countries in the Middle Ages. Capitalism was not lacking; what was lacking was a spirit of capitalism, and an organization of capitalism, distinctive to modern capitalism. Weber refers to the two kinds of capitalism as, on the other hand, "traditional (pure) capitalism, and, on the other hand, modern or "rational capitalism".

Traditional capitalists were certainly interested in making profits; but there was nothing about this that could be regard as a social "ethic". The ideal was to acquire social position and, of course, the money to support it, but not to become bogged down in the struggle to make money. A comfortable aristocratic lifestyle was the goal, and business was carried out with an attitude of getting it over with as easily as possible. The most lucrative form of capitalist enterprise consisted of long-distance trade, preferably in luxury items on which a large profit could be made; spices from the Indies, silk from China, gold and jewels from the fabled mines of the Spanish conquistadors sought in the Americas.

Weber regards all these forms of traditional capitalism as sharp contrasts to rationalized modern capitalism. Rational capitalism is based not on luxury trades but on mass production of the commodities of everyday life. The medieval merchant sought to make a fortune out of a single cargo of jewel; the modern capitalist makes a far bigger fortune out of mass marketing humble commodities such as tires or toilet paper. Hence the traditional attitude, the greedy maximization of profit in a one-shot enterprise, has been overcome by a new attitude which relies upon the accumulation of many small gains. Not high prices and windfall profits, but moderate prices and high, steady sales are the driving force of modern capitalism. Modern machinery is the result of a prior revolution in the spirit of capitalism. Rationalized capitalism means that hones dealings I business, rather than greedy search for maximal profit; reliable, steady production and sales, turning into a system of mass production; and continuous savings and reinvestment into further business growth.