

# INTERDEPENDENCE OF DEMAND THEORY AND CONSUMER PREFERENCE

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*Summary:* Consumer preferences are characterized by multidimensionality that originates from the nature or structure of the human personality. In addition, the formation of preferences is the most important determinant of the demand curve. Identifying preferences by form and linking consumer demand to price and consumer income can affect a company's business performance. Goal of this paper is to identify ways to create preferences as a factor in shaping demand, all the way to willingness to pay. Reason for the research is because only on the basis of price changes it is not possible to predict the behavior of an individual consumer (inverse price-quantity ratio), to predict whether the demand for that product will increase, decrease or remain the same.

*Key words:* consumer, preferences, demand, usefulness, society

## 1. INTRODUCTION

If we start with two important questions in economics: when and what to produce, we come to the answer that consumer - an individual, is one of the most important determinants of demand. Without consumer there would be no reason to answer the mentioned questions, also without the existence of consumer there would be no other variables such as income, prices, costs, production and the like. If we start from the assumption that a person is the most important determinant in terms of demand, it is necessary to get to know the structure of a person's personality that determines the process of making business decisions. In this way, it is possible to identify the ways in which consumer preferences arise as complex determinants that form the demand curve. As the aim of this paper is to identify ways to create preferences so that the company can maximize its performance, it is necessary to analyze in detail consumer preferences, in other words, it is necessary to know not only the type and level of preferences but also their relationship.

## 2. PERSONALITY OF CONSUMER AS THE MOST IMPORTANT DETERMINANT OF ECONOMY

One of the most important elements of the personality structure is the motive. Motive and motivation are complex concepts which is confirmed by their definition in [1] where "motives are internal factors (organic or psychological factors) that drive the activity, which direct and manage it to achieve certain goals." Depending on the complexity of motivational concepts. The following types of motives can be distinguished: needs, instincts, desires, aspirations and intentions [2].

Needs are a source of motive and they occur when there is no equivalence between what is needed and what exists in the human body. A consciously experienced need is a motive. When a person consciously directs an experienced need to specific objects or events that can satisfy the needs, we call it desires. Aspiration as a motivational concept is similar to desire, except that the consciously experienced need is now directed towards a specific object or event that can satisfy people's needs. Intention is a complex motivational concept that includes several activities that are related to the motive, the decision on the realization of the motive as well as undertaking activities in order to realize the motive.

In [1], the existence of a hodogram in the form of a motivational cycle that occurs as a consequence of the appearance of motives was determined. When there is equality between the necessary and the existing in the human body, homeostasis, ie balance, is achieved. When the relative balance is disturbed, then homeostasis is disturbed and there is an effort to restore it. The process of establishing homeostasis in the human body takes place in several steps. At the very beginning, a source of imbalance appears. It occurs when there is tension or a feeling of discomfort in a person. By becoming aware of the need and transforming it into instincts, a motive appears. As a factor that moves a person, he directs his behavior. Based on the considered solutions, a person chooses the best solution and consequently makes a

decision on directing his activity in order to achieve the goal. Taking action by an individual to meet their needs results in relief. It occurs as a consequence of the discharge of a certain amount of energy which is associated with the emergence of a specific type of motive. In case the undertaking of activities did not bear fruit, if the need was not satisfied, there is no relief in the form of calming down, and then the homeostatic cycle is renewed. It is important to mention a number of external factors that can also be an important factor in consumer economic choices [3].

The next element of the structure of a person's personality that influences business decisions is the rationality of the individual. According to the use of individual rationalism the most important factor when making economic decisions. In [4], it was pointed out that the founders of economic liberalism, David Ricardo and Adam Smith, wrote about the rational element of the human being. In [4], the position of David Ricard is emphasized, where the principle that determines human economic decision-making is described in the form of comparative advantages, and which is based primarily on rationality and then the selfishness of the individual. Also in [4], the position of Adam Smith was emphasized, who also very well recognized and connected the two human characteristics of rationality and selfishness. In his work *The Wealth of Nations* published in 1776, Adam Smith spoke primarily about human selfishness, with the proviso that only maximizing selfishness cannot be achieved without the application of rationality, in this regard: "An individual depends almost constantly on the help of his brothers and in vain is to expect them to provide it to him for their goodness. It will be much easier for them to survive if they turn their love for themselves to their advantage and show that it is in their interest to do what he demands of them. We don't get lunch because of the kindness of butchers, brewers or bakers, but because they take care of their own interests. It is not the intention of every individual to increase the public interest, nor does he know to what extent it increases it. His intention is only personal gain, and here, as in many other cases, he is guided by an invisible hand to achieve a goal he did not even intend. Following the personal interest, the individual often promotes the interest of society more successfully than when he really intends to do so." [4] Thus, the mentioned principles are the basic postulates on which today's ruling neoliberal economic doctrine is based. Selfishness and rationality are basically the main driving motives of an individual, with the study of rationality through various types of economic laws being a very useful means of maximizing selfishness as the ultimate motive of the individual.

As mentioned, the economy relies primarily on human rationality in making economic decisions, but because of the complete understanding of the economic decisions of individuals, the irrational component of the personality structure of the individual as a determinant of the economy is also important. Selfishness in psychology is found in the irrational part of the human being in emotions. Practice in many cases shows that the irrational element of an individual can be key in making business decisions, for example when it comes to luxury goods or goods of poor quality or marketing activities of companies and the like. The justification of this claim can best be seen in [5] in the views of psychoanalyst K. G. Jung, who best describes the power of emotions: "People do not always behave rationally and do not behave as it would be in their best interest. The "rational man," on whom so much economic theory is based, is at best only a partial description of human beings in terms of how they really function. People are driven by psychic forces, motivated by thoughts that are not based on rational processes, and are subject to notions and influences that transcend those that can be measured in a visible environment. In short, we are beings who are driven by emotions and representations just as much as we are both rational and adapted to the environment. We dream as much as we think, and we probably feel much more than we think. At the very least, many thoughts are colored and shaped by emotions, and most of our rational calculations are servants of our passions and fears." [5] Thus, emotions are also very important in making business decisions, so they need to be taken into account. [1].

## **2.1. The value system of the individual**

Depending on the importance of individual personality subsystems, their development as well as mutual interactions, the formation of a value system in an individual depends, as well as business decision making. The very formation of the consumer value system is a very complex process when it is influenced by numerous factors. The two most important factors that determine an individual and thus his decisions are biological and sociological factors [6]. People's economic decision - making may also depend on other factors such as the context of the decision, where and when the decision is made (time and space). Thus, for example, having the same type and amount of output in different contexts may have different benefits for an individual. So that the consumer can make a decision and that more output is not better / more useful or that the same amount and the same type of output has a different level of usefulness. The context itself can be connected with the culture of people, so that over time in various cultures, people's needs change, disappear, new ones appear, and yet everything is basically connected with the built value system of the individual.

It can be concluded that when an individual makes a decision about spending he tries to maximize his usefulness, and this can be achieved if he behaves in the most rational way. Due to such behavior in the economic literature, the consumer is also referred to as an economically rational being (*homo economicus*). The realization of an individual's motive is inextricably linked to his rational component. The use of a rational component is highly desirable in people's daily economic decisions. It can be said that the use of individual rationality as an individual personality trait is necessary and justified because only in that way can the consumer get maximum benefit for his income, and also the producer himself can get maximum benefit by using his budget.

## **2.2. Usefulness**

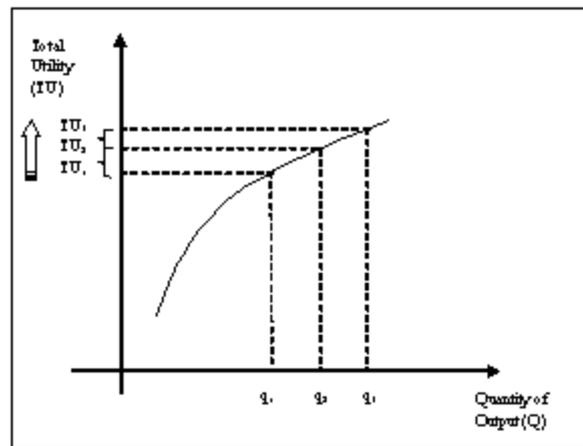
Before analyzing microeconomic laws, it is necessary to distinguish between two concepts, namely utility and value. These are factors that are crucial for an individual when making economic decisions. How an individual will make his own judgment about usefulness, ie value, is largely related to his maturity or the realized process of individualization. Returning to the mentioned built value system of an individual is necessary, because the assessment of usefulness, ie value is a consequence of the value system of an individual.

Researchers most often state that consumers choose the products that provide them with the greatest benefit, the greater the usefulness of the product, the more likely it is that the consumer will choose a specific product [7]. For an individual, what he needs, what he can use to satisfy his motive, his need, is also useful to him. Usefulness can be of a material and / or non-material nature. Something is valuable to an individual if it is useful to him in the first place. So value can be defined as a monetary assessment of utility. Monetary valuation can be subjective and objective in nature. The assessment of usefulness, ie the value that an individual attributes to something, is of a subjective nature. Value as an assessment of utility by many market participants is of an objective nature.

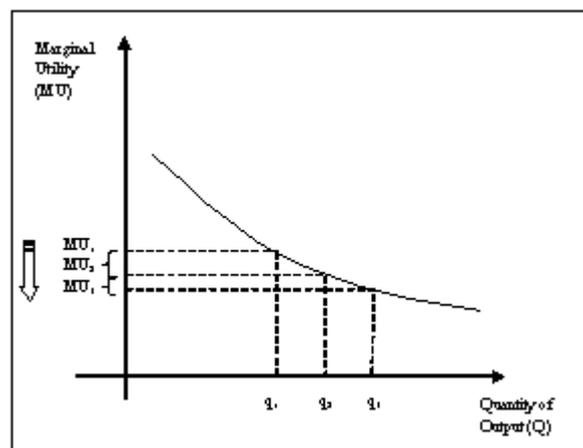
Maximizing only one's own benefits leads to the creation of a good basis for maximizing general social benefits. Maximizing one's own usefulness due to selfishness stems from the characteristics of an individual's personality in the form of egocentrism and narcissism, because a person is primarily directed at himself in the sense that he and his family are the most important, the best, the most capable. Thus, rationality as a means aimed at maximizing end outcomes is not a problem, but the emergence and development of excessive selfishness is a problem. Thus, when rationality is used to eliminate fears and to acquire and increase the freedom of both the individual and society as a whole, then it can be expected that the individual will turn his morality into ethics during the time and process of individualization. Otherwise, there will inevitably be problems of a socio-economic nature.

In the case of utility, a clear distinction needs to be made between total utility and marginal utility. According to the "utility theory", when a consumer consumes an additional unit of output, he will have an increase in total utility, but with each new unit of output the utility for the consumer decreases, so the overall utility for an individual grows more slowly with each new output (Figure 1).

**Graph 1. Total utility output [8]**



**Graph 2. Marginal utility of output [8]**



The difference between total and marginal utility can be seen in Charts 1 and 2. In the case of marginal values, each additional / marginal output discards a smaller marginal benefit to its user compared to the magnitude of the user's benefit from using the previous output, ie marginal utility for an individual with with each new unit of output it decreases (Chart 2). If a person is thirsty, the first glass of water has the greatest usefulness for the person, the second less, the third even less useful, and so on. Most people, having a similar value system (in the economic sense), make

economic decisions in a similar way. Common to all of them is the rule of decreasing marginal utility, which means that if we use more and more of the same good (or have more) then that good will have less and less benefit for an individual, that is, consumer will value it less and less.

### **3. CONSUMER PREFERENCES AS THE THIRD DETERMINANT OF DEMAND**

Consumers make a number of decisions in an effort to meet their needs. The economy starts from the assumption that consumers, when making decisions regarding the satisfaction of their needs, start from their interests, so people in the economy are viewed as rational economic beings (*homo economicus*) and make decisions on that principle. Consumer, as an economic being, guided by his rationality, sees all possible alternatives in terms of satisfying his needs. After that, the consumer, based on conscious and willing activity, makes a decision to choose one of several options in terms of meeting their needs, all with the aim of maximizing its usefulness. The decision of consumers in terms of maximizing their usefulness mostly depends on many factors such as the motives of the individual, the rationality of the individual, market prices, the budget constraint of the individual, the context and the like. In addition, the important fact is that consumers make their decisions including time and money [9].

One of the most important factors that essentially determines an individual's decisions is rationality. In other words, the consumer will opt for a specific output depending on whether he satisfies the specific motive and to what extent. The very usefulness of the output is related to the physical and / or psychological satisfaction of the consumer's motives. For these reasons, the success of a business depends on the ability to discover the type, nature of consumer preferences and the level of utility provided by the preference as well as their inter relationship.

Preferences represent the motives of an individual, ie his needs, instincts, desires, intentions and aspirations. In this regard, there are different types of people's motives, but also different types of preferences. People in an effort to satisfy different types of motives, prefer different types of output at the same time. In that way, their mutual interaction inevitably occurs, which is determined by human rationality and usefulness. Outputs may be different, may satisfy the same or different motives, thus different outputs may be in competition with each other or complement each other in order to achieve utility for the consumer [1].

Consumer preferences are graphically presented as "indifference curves". The shape of the indifference curve serves to show the mutual interaction of different types of needs, and their position determines the level of utility of needs. According to [4], the shape of the indifference curve shows "the readiness of consumers to replace one good with another". Thus, a person satisfies his motives in a certain level of utility by: 1. choosing a basket of goods using several goods at the same time, 2. making a decision to use only one good, 3. making a decision to use a fixed proportion in the consumption of one good in relation to another good . The types of preferences, the level of usefulness of preferences as well as the interaction of different types of outputs as preferences are graphically represented by indifference curves that try to describe the following types of preferences (outputs, goods and services, motives) as systematically as possible:

- normal preferences represented by Cob-Douglas indifference curves in the form of convex curved lines;
- preferences in the form of substitutes shown by indifference curves in the form of straight lines;
- preferences in the form of complements shown by indifference curves in the form of rectangular lines and
- quasi-linear preferences shown by indifference curves where "the utility function for good 2 is linear, but is probably (nonlinear) for good 1" [8].

Consumer propensity to offer can be influenced by the preferences of others in many ways, from social identification and inclusion in the benefits of network externalities. Quantitative models of consumer behavior when shopping often do not recognize that preference and choices are interdependent [10]. Consumer preferences and behavior are influenced by the tastes of consumers and the tastes of others. People who identify with a particular group often adopt the group's preferences, resulting in interdependent choices. Interdependence can be driven by social issues, the recognition of respected people that increase a brand's credibility, or the learning of the preferences of others who may have information that is not available to the decision maker. Moreover, because people engage in multiple activities with their family, associates, neighbors and friends, interdependent preferences can be spread across and across multiple networks [10]. Modern economists study a wide range of family and household behaviors that earlier economists considered to be peripheral or out of the domain of discipline: marriage and fertility, education and health care, drug addiction and criminal activity, transfers and bequests [11].

If two individuals express the same preference, their preferences are identical. However, if they get a choice between going to a football match and attending a classical music concert, one individual chooses a football match and the other prefers the concert, their order of preferences is different. It would be expected that the individual will try to improve its usefulness when making decisions. If he expresses the advantage of a football match in relation to a classic concert, then it seems reasonable to conclude that the usefulness will be greater when an individual attends a game than when he attends a concert. If not, there would be doubt about the concept of utility used, or the concept of preference would be used in reverse. In economic theory, because utility is defined so that the preferred alternative always represents a higher level of utility or at least not lower than the rejected alternative [12].

In economic models of behavior, it is always assumed that an individual behaves in such a way that his usefulness is maximal. In his attempts to maximize utility, he is hindered by one or more limitations. Under rather weak assumptions, consumer purchases are uniquely determined by its income and prices. Budget constraints together make up prices and

revenue, so what you buy has to pay. The form of the budget constraint is an auxiliary function that represents its preferences. As stated earlier, it is sufficient that the utility function is measurable on an ordinal scale [12].

#### 4. CONCLUSION

The source of the imbalance occurs at the very beginning. By becoming aware of the needs of consumers and transforming them into instincts, a motive that drives behavior appears. From the above, there are wishes, search for solutions, review of available and finally the choice of the best solution for the consumer that achieves the goal. Consumer actions are largely related to rational behavior that depends on human thinking and reasoning. But people do not always behave rationally and in the best interests of them. The reasons for such behavior should be sought in the psychic forces, processes and susceptibility of man to the influences of the environment. From the above, it can be concluded that in addition to considering the budget constraint that is affected by price and / or change in income, the third determinant that affects the demand for outputs is consumer preference. In the end, it can be concluded that the company, director, manager must first determine exactly what type of preferences are in question, then to what extent there is a possibility to satisfy preferences and finally what causal relationships the analyzed preferences have in relation to other preferences. Only by giving adequate answers to the previously asked questions, it is possible to successfully adjust the company's resources to the needs of the market and thus achieve the company's goal function, which is to maximize profits.

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