



RESEARCH ARTICLE

REAL LIFE PURCHASE DECISION: A CASE OF PRAGMATIC SUB-RATIONALITY

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ABSTRACT

In the study of consumer's behaviour we find that, starting from Marshall to Hicks, everybody assumes that the consumer will behave rationally. In other words behaviour of an individual consumer must satisfy a regularity which can be explained logically. They have based their logic in the form of utility maximization. That means an individual consumer is motivated to maximize his/her utility and his/her every purchase decision is based on the principle of utility maximization. Therefore utility maximizing behaviour is treated as rational behaviour to Marshall and Hicks. Such straight forward correspondence between rationality and utility maximization is regarded as core of the analysis of consumer's behaviour. Even Samuelson's Revealed Preference Theory implicitly considers that a commodity bundle is chosen by an individual consumer as it yields maximum utility to him/her. All the conventional approaches to the theory of consumer's behaviour assume that consumer is synonymous to buyer. All of them identified consumer as a buyer and no consumer faces the problem of indivisibility in respect of their consumption. With this back ground in mind our present paper seeks to explore whether the concept of rationality is confined only within utility maximization or it has a wider connotation. . Section-I of this paper contains Introduction. Section-II deals with Analytical framework and Section-III contains Analysis of the problem. Section IV is devoted to Findings and Conclusion

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INTRODUCTION

Theory of demand addresses two fundamental questions. First, how much quantity of a particular commodity is purchased by an individual consumer. Second, what will be the change in purchase of a commodity following a change in price of the commodity? From time to time, different theories have been advanced to explain consumer's demand for a good and to derive a valid demand theorem. Cardinal utility analysis is the oldest theory of demand which provides an explanation of consumer's demand for a product and derives the law of demand which establishes an inverse relationship. Cardinal utility analysis of demand is based upon certain important assumptions and this cardinal utility analysis has been criticized because of its unrealistic assumptions.. Indifference curve analysis is claimed to be superior to cardinal utility analysis because of its closeness to the reality. But, still it is criticized by many economists due to some unrealistic assumptions. Robertson blamed this analysis by pointing out it as an old wine in a new bottle. Many other economists such as

F.H. Knight, Armstrong, Boulding criticized the analysis in several ways. Prof. Samuelson has invented an alternative approach to the theory of consumer behaviour which, in principle, does not require the consumer to supply any information about him. If his tastes do not change, this theory, known as the Revealed Preference Theory (RPT), permits us to find out all we need to know just by observing his market behaviour, by seeing what he buys at different prices, assuming that his acquisitions and buying experiences do not change his preference patterns or his purchase desires. In the study of consumer's behaviour we find that, starting from Marshall to Hicks, everybody assumes that the consumer will behave rationally. In other words behaviour of an individual consumer must satisfy a regularity which can be explained logically. They have based their logic in the form of utility maximization. That means an individual consumer is motivated to maximize his/her utility and his/her every purchase decision is based on the principle of utility maximization. Therefore utility maximizing behaviour is treated as rational behaviour to Marshall and Hicks. Such straight forward correspondence between rationality and utility maximization is regarded as core of the analysis of consumer's behaviour. Even Samuelson's Revealed Preference Theory implicitly considers that a commodity bundle is chosen by an individual consumer as it yields maximum utility to him/her.

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All the conventional approaches to the theory of consumer's behaviour assume that consumer is synonymous to buyer. All of them identified consumer as a buyer and no consumer faces the problem of indivisibility in respect of their consumption. With this background in mind our present paper seeks to explore whether the concept of rationality is confined only within utility maximization or it has a wider connotation. In our practical life we may very often face such situation where our concern over the utility the 'dependent consumer' derives as well as the problem of indivisibility leads us to behave in a manner that does not suit the norm prescribed in standard economic literature. In other words conventional approaches to the theory of consumer's behaviour fail to accommodate such real life situation particularly when there exists 'dependent consumer' and there emerges the problem of indivisibility. In real life situation we find very limited scope to go for utility maximizing principle. A possibility of sub-optimal equilibrium has been propounded by Herbert A Simon in his "Bounded Rationality" approach where cognitive limitation of mind, time constraint and asymmetric information restrict consumers reach optimal state. But the case taken up here is quite different from the cases covered by "Bounded Rationality" approach. Here pragmatic purchase decision becomes subjected to blended operation of voluntary and involuntary forces and thereby leads the consumers to attain a sub-rational equilibrium. Voluntary force operates through discrimination made by the concerned buyer and involuntary force operates through the existence of indivisibility of the varieties of a class of commodities. This is the hard reality and a pragmatic purchase decision is a case of sub-rational equilibrium.

SECTION-II: ANALYTICAL FRAME WORK:

Let A, B and C are three consumers and A acts as a buyer who buys for himself as well as for his dependent consumers B and C. A being a buyer takes purchase decision. In the conventional analysis of consumer's behaviour it remains implicit that the consumer actually gets that much utility what he perceives. In real life we get utility at the time of consumption or after consumption, but purchase decision is taken prior to consumption. If any discrepancy crops up between actual utility and perceived utility, the entire conclusion will be subjected to rethinking and that may be another area of Research. Moreover actual utility derived by a dependent consumer is not possible to be known to the buyer. He may have an idea about the utility he derives. Therefore purchase on the basis of utility they derive is of no use here. But the buyer will have to purchase and it has a bearing on the utility to be derived by the consumers. In order to keep parity the buyer should base his purchase decision on some common criterion. The sacrifice of utility through payment for the purchase then acts as such criterion and it can be assumed that an individual consumer gets that much utility what the buyer has sacrificed. If he takes decision on the basis of sacrifice he may treat all the consumers equally or may treat them unequally. If it is found that the loss of utility due to payment of additional one rupee is equal for each and every one of the consumers, we can say that the buyer treats all the consumers equally. If any discrepancy occurs in case of any individual we should say that the buyer is treating the consumers unequally. In other words the buyer is practicing discrimination among the consumers. In case of equal loss of utility due to payment of additional one rupee we consider that Marginal Utility of money sacrificed for everyone is equal to each other and

therefore we have $MU_m^A = MU_m^B = MU_m^C$. In case of discrimination we have either $MU_m^A = MU_m^B \neq MU_m^C$ or $MU_m^A \neq MU_m^B = MU_m^C$ or $MU_m^A = MU_m^C \neq MU_m^B$

Now we have to analyze what happens to utility maximizing principle. In other words we have to explore whether utility maximizing principle will be viable or not. For analytical convenience we can distinguish between four possible cases of purchases such as:

- Purchase of same commodity in same quantity for each
- Purchase of same commodity in different quantity
- Purchase of different commodities/ different variety of same commodity for different consumers
- Purchase of same commodity for some consumers and different commodities/ different variety of same good for others.

It is to be noted here that the above classification of purchases is exhaustive and it does not matter whether A acts as buyer or B or C because nature of purchase must fall under any one of the classes mentioned above Now let us analyze the cases one by one.

SECTION-III: ANALYSIS

CASE: I In the event of purchase of same commodity in same quantity for each the buyer is confronted with same price and same quantity. If we assume that over the range of budgetary allocation the buyer's marginal utility of money (MU_m) sacrificed are evenly distributed over the consumers, we have equality of ratio of marginal utility to price for each individual and thereby we have

$MU_x^A / p_x = MU_x^B / p_x = MU_x^C / p_x$. This will be the case provided the selected quantity crosses the maximum desired level of consumption for none of the consumers. But if the buyer discriminates among the consumers, equality of ratio of marginal utility to price cannot be maintained. In that case either

we have $MU_x^A / p_x = MU_x^B / p_x \neq MU_x^C / p_x$ or
 $MU_x^A / p_x \neq MU_x^B / p_x = MU_x^C / p_x$ or
 $MU_x^A / P_x = MU_x^C / P_x \neq MU_x^B / P_x$

CASE: II In the event of purchase of same commodity in different quantity the buyer is confronted with same price and different quantity. If we assume that over the range of budgetary allocation the buyer's marginal utility of money (MU_m) sacrificed are evenly distributed over the consumers, we have equality of ratio of marginal utility to price for each individual and thereby we have $MU_x^A / p_x = MU_x^B / p_x = MU_x^C / p_x$. This will be the case provided the selected quantity crosses the maximum desired level of consumption for none of the consumers. But if the buyer discriminates among the consumers, equality of ratio of marginal utility to price cannot be maintained. In that case either we have $MU_x^A / p_x = MU_x^B / p_x \neq MU_x^C / p_x$ or

$$MU_x^A / p_x \neq MU_x^B / p_x = MU_x^C / p_x \quad \text{or}$$

$$MU_x^A / P_x = MU_x^C / P_x \neq MU_x^B / P_x$$

CASE: III In the event of purchase of different commodities or different variety of same commodity for different consumers the buyer is confronted with different prices. If we assume that over the range of budgetary allocation the buyer's marginal utility of money (MU_m) sacrificed are evenly distributed over the consumers, we have equality of ratio of marginal utility to price for each individual and thereby we have

$$MU_x^A / p_x = MU_y^B / p_y = MU_z^C / p_z. \text{ But if the buyer discriminates among the consumers, equality of ratio of marginal utility to price cannot be maintained. In that case either we have } MU_x^A / p_x = MU_y^B / p_y \neq MU_z^C / p_z \quad \text{or}$$

$$MU_x^A / p_x \neq MU_y^B / p_y = MU_z^C / p_z \quad \text{or}$$

$$MU_x^A / P_x = MU_z^C / P_z \neq MU_y^B / P_y$$

CASE: IV In the event of purchase of same commodity for some consumers and different commodities/ different variety of same good for others the buyer is confronted with different prices. If we assume that over the range of budgetary allocation the buyer's marginal utility of money (MU_m) sacrificed are evenly distributed over the consumers, we have equality of ratio of marginal utility to price for each individual and thereby we have

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$$MU_x^A / p_x \neq MU_y^B / p_y = MU_z^C / p_z \quad \text{or}$$

$$MU_x^A / P_x = MU_z^C / P_z \neq MU_y^B / P_y$$

After analyzing all possible cases of purchase let us turn to the most pertinent question why a buyer discriminates. In the event of discrimination we may distinguish between two types of situations. Type I refers to the cases where buyer discriminates voluntarily. Type II are the cases where buyer becomes bound to discriminate. Voluntary discrimination comes into play depending on who the dependent consumers are. In other words such discrimination originates out of the relationship the dependent consumers have with the buyer.

Here the social relation matters most. Coming to the case of discrimination arising out of compulsion we note that circumstances like obligatory purchases and purchase of different goods or variety of same good restrict buyer to maintain equality of sacrifice and ultimately lead to have sub optimal equilibrium. Purchase of these different goods with different prices and variety of same good with distinct prices creates a problem of smooth adjustment to have equality of sacrifice and the problem is similar to what we observe in case of adjustment of consumption in the presence of indivisibility. Therefore we can easily say that the existence of indivisibility is the involuntary force that restricts the buyer to reach optimal situation.

SECTION-IV: FINDINGS AND CONCLUSION: In real life purchase the viability of utility maximizing principle is very limited to certain restricted cases where the buyer does not discriminate among the consumers. In our practical life the practice of discrimination in presence of dependent consumers are not at all unusual and such practice of discrimination is the source of non fulfillment of utility maximizing principle. We should note that the practice of discrimination is not simply a matter of choice. When discrimination comes as a matter of choice alone it is of voluntary nature. But when it comes as a compulsion on the buyer it becomes involuntary in nature. Thus discrimination becomes the result of operation of either voluntary force or involuntary force or a blended operation of both.

In our practical life we find very limited scope to go for utility maximizing principle. A possibility of sub-optimal equilibrium has been propounded by Herbert A Simon in his "Bounded Rationality" approach where cognitive limitation of mind, time constraint and asymmetric information restrict consumers reach optimal state. But the case taken up here is quite different from the cases covered by "Bounded Rationality" approach. Here pragmatic purchase decision becomes subjected to blended operation of voluntary and involuntary forces and thereby leads the consumers to attain a sub-rational equilibrium. Actually evenly distributed concern is rarely observed and it is reflected through the practice of discrimination. At the same time problem of indivisibility of varying degree plays an important role. As a result pragmatic purchase decision becomes subjected to blended operation of voluntary and involuntary forces and thereby leads the consumers to attain a sub-rational equilibrium. This is the hard reality. Therefore we want to conclude that pragmatic purchase decision is a case of sub-rational equilibrium. While we go for analyzing consumer's behaviour we should not only stick to such utopian concept of rationality, rather we should take into account the possibility of pragmatic sub-rationality.

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