

A Unified Consumer Demand Theory

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Abstract

The contradictory assumptions of Marshallian and Hicksian demand theories are avoided in a unified exchange theory.

Keywords

Demand theory, utility theory, Marshallian demand function, Hicksian demand function

1 Introduction

The assumptions underlying the classical consumer demand theories are contradictory. The contradiction is reconciled when all the variables under consideration are taken account of in a unified exchange framework.

2 Indeterminate Demand Quantities

Demand quantities are determined in Marshallian demand theory under the assumption that consumers maximize their utility while satisfying a budget constraint. In contrast, Hicksian demand quantities are determined under the assumption that consumers minimize their expenditure while keeping the value of their utility function constant. The fact that these contradictory assumptions produce different demand quantities raises obvious questions: Which of these demand theories is the correct one? Are consumers Marshallian or Hicksian?

3 A Unified Demand Theory

Since the consumer's utility function does not include money as one of the variables in these theories, both are incorrect. A correct formulation (i) must take into account the

consumer's utility for all the variables under consideration including money, (ii) it must be an exchange formulation because consumers exchange some quantities of their resources, typically money, in return for some quantities of goods.

Denote the quantities of money and goods held by a consumer prior to an exchange by q_M and (q_1, \dots, q_n) respectively. The problem of maximizing the consumer's utility is to determine those quantities of money x_M and goods (x_1, \dots, x_n) for which the utility of all the variables $u(x_M, x_1, \dots, x_n)$ is maximized post exchange, where the consumer's choices are constrained by the initial quantities (q_M, q_1, \dots, q_n) .

4 Conclusion

The Marshallian and Hicksian demand theories, where the consumer's utility for a fundamental variable is not taken account of, are deficient. The contradictory assumptions of these theories vanish when all the variables under consideration are taken into account.