

APPROXIMATE DETERMINATION OF INDIFFERENCE SURFACES FROM FAMILY BUDGET DATA

R. RADHAKRISHNA¹

1. Introduction :

Econometric models built to delineate consumer behaviour assume overwhelming importance in planned economic growth. They have come to be regarded as indispensable tools in the preparation of plans. These models are highly useful in making demand forecasts and in studying the effect of the individual price movements on forecasting and their knowledge is a must if manipulation of price structure is to become an important instrument of planning. Thus the need for building disaggregative and realistic models of consumer behaviour for the economies can hardly be over emphasized. Empirical studies in consumption centre largely around Engel curves, and the results of Engel function analysis obtained from one period cross section data are mostly used for demand projections. The studies carried out on Indian consumption patterns by Radhakrishna (3, 4) indicate that the assumption of stable income effects implied in the demand projections may not hold good especially for detailed commodity categories. Indifference surface approach which combines theory and empiricism in a small compass may provide a better alternative for describing consumer behaviour and for making reliable demand forecasts. Further, this approach is useful in the construction of constant utility price index.

Wald [10] developed a mathematically elegant method of deriving indifference surfaces. Despite its being well received by Prais and Houthakker [2] Tinbergen [7] and Tintner [8, 9], too little work has been done either on theoretical or empirical plane possibly because it involves intricate computations when more than three commodity groups are involved.² Only Nordin³ employed it in a rather simple case of deriving indifference surfaces for two commodity groups.

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² Some of the views expressed on Wald's method are as follows : Tintner [9, p. 21] observed "Thanks to a method proposed by Wald (1940), we are able to approximate the static utility functions or indifference surfaces". Prais and Houthakker [2, p. 102] observed "..... by comparing the results of family-