

A Reconsideration of the Testing of Time Separability Hypothesis: Use of the Frisch Profit Function

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The main objective of this paper is twofold. We first advocate a more general use of the consumer (Frisch) profit function in representing static and intertemporal consumer preferences, and generating empirical demand systems. In particular, we will adopt the numerical inversion method proposed by McLaren, Rossiter & Powell (1996) to estimate the type of profit functions in which the closed functional forms for the Marshallian indirect utility functions are not available. Our second aim is to re-examine the testing of the intertemporal additivity hypothesis. To do so, we will utilise Browning's (1991) Simple Non-Additive Preference (SNAP) structure model to build up our intertemporal profit functions. We also attempt to correct some obvious mistakes made by Browning in specifying and estimating the Frisch intertemporal demand equations. As will be shown, when our suggested remedial actions are taken, a radically different picture emerges. With our new functional forms and modified estimation method, the intertemporal additivity hypothesis is supported by our data, which casts doubt on Browning's other results.

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