INTRODUCTION TO THE SPECIAL ISSUE ON NEW ECONOMETRIC MODELS IN MARKETING

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Scientific developments in econometrics proceed along various lines. One such line concerns the developments in computing power. Newer and better computers have facilitated the creation not only of larger models but also of non-linear and non-parametric models. Parameter estimation in simultaneous equation models used to take weeks, whereas nowadays similar exercises require efforts that get measured in seconds. A second cause for progress in econometrics, which also concerns the current special issue, is data availability. Some five decades ago one would have access to annual time series data for some national economies, while nowadays we have access to almost every financial transaction and each movement (of whatever nature) in retail stores, to name just a few examples.

The incremental value of better data and of faster computers is particularly noticeable in marketing research. In the last two decades we have witnessed a significant increase in new econometric models in this area, where these models allowed for a detailed focus on individual behaviour which in turn could be linked to economic theories on such behaviour. Although data are plentiful, there is still much unknown about human drivers for, say, consumer behaviour, and hence marketing models often address unobserved features. For example, attitudes, satisfaction levels, and consideration sets are notoriously difficult to observe, but models for, say, brand choice should somehow include these aspects. Recent developments in the academic marketing literature have shown progress in econometrics, both in terms of theory and in terms of application. For example, microeconometric models for panel data which incorporate unobserved heterogeneity across individuals now seem to find their way into other areas of economics. Hence, owing to increased data availability and to the specific nature of human behaviour when making a choice between brands or products, at the same time being influenced by the marketing mix, we notice progress in econometrics due to marketing applications.

In this special issue of the *Journal of Applied Econometrics*, we collect papers that show to some extent what has been made possible due to application in marketing research. The papers give an impression of the type of data that are commonly analysed in marketing, the type of new econometric models that have been developed with the specific marketing application in mind, and the type of non-standard estimation routines that are commonly implemented. We hope that for most readers this material will give an impression about the current econometric state of marketing research and that it will be inspiring for their own research. The collection of papers in this issue firmly demonstrates what better data, better computers and an interesting application area can do for the econometrics discipline.

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