Responses to the incidental parameter problem

Pua, A.A.Y.

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In recent years, we have seen an explosion of data collected from individuals, firms, or countries across short or long periods of time. This type of data gives us an opportunity to study the dynamics of change while controlling for time-invariant unobserved heterogeneity. Unfortunately, this type of heterogeneity, which is usually in the form of individual-specific fixed effects, creates problems for identification, estimation, and inference, especially if we continue to use default procedures without modification or without critical exploration. This dissertation revolves around a common theme – what practices and methods can be considered appropriate responses to the incidental parameter problem in panel data models. My approach to research is firmly rooted in the examination of empirical and theoretical practices so that we can come to an understanding of what we can and cannot do.

Andrew Adrian Yu Pua (1984) is no stranger to double degrees. He received a BA in Economics and a BSc in Accountancy from De La Salle University – Manila (DLSU). He also received a master's degree in mathematics from the same institution. After around three years as a faculty member of DLSU, he traveled to Europe to commence postgraduate studies. With the support of the European Commission through the Erasmus Mundus scheme, he obtained an MSc Wirtschaftsmathematik from Universität Bielefeld and a Master Mathématiques Appliquées à l'Economie et à la Finance from the Université Paris 1 Panthéon-Sorbonne. Now, with the support of the same commission, he is about to receive his PhD in Economics from both the University of Amsterdam and the Université Catholique de Louvain.

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Dit proefschrift is tot stand gekomen in het kader van EDE-EM (European Doctorate in Economics – Erasmus Mundus), met als doel het behalen van een gezamenlijk doctoraat. Het proefschrift is voorbereid aan de Faculteit Economie en Bedrijfskunde van de Universiteit van Amsterdam en aan de Center for Operations Research and Econometrics van de Université Catholique de Louvain.

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This thesis has been written within the framework of the EDE-EM (European Doctorate in Economics – Erasmus Mundus), with the purpose of obtaining a joint doctorate degree. The thesis was prepared in the Faculty of Economics and Business at the University of Amsterdam and in the Center for Operations Research and Econometrics at the Université Catholique de Louvain.

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