**Simulating Heterogeneous Multinational Firms[[1]](#footnote-1)\***

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March 2011

**Abstract:**

This paper develops a micro-simulation framework for multinational entry and sales activities across countries. The model is based on Eaton, Kortum, and Kramarz’s (2010) quantitative trade model adapted towards multinational production. Using micro data on Japanese manufacturing firms, we first stylize the empirical regularities of multinational entry and sales activity and estimate the model’s structural parameters with simulated method of moments. We then demonstrate that our adapted model is able to replicate important dimensions of the in-sample moments conditioned in our estimation strategy and does a reasonable job in external model validation tests. Importantly, it is able to replicate activity under an economic period with a far different level of FDI barriers than was conditioned upon in our estimation sample. Overall, our research highlights the richness of the simulation framework for understanding multinational activity and points towards its future usefulness as a quantitative tool for FDI policy analysis.

***Keywords*:** Multinational firms, FDI, Firm heterogeneity, Simulation, Model validation

***JEL Classification*:** F10, F23, L25, R12, R30

1. \* This research is undertaken as part of the project on “Japan Industrial Productivity Database” at the Research Institute of Economy, Trade and Industry (RIETI). The authors would like to thank RIETI for research opportunities and the Ministry of Economy, Trade, and Industry (METI) for providing firm-level data. We thank Theresa Greaney, Hayakawa Kazunobu, Kaoru Nabeshima, Kyoji Fukao, Kozo Kiyota, Tim Halliday, Toshiyuki Matsuura, and seminar participants at the Institute of Developing Economies, Keio University and RIETI for very useful comments. The opinions expressed and arguments employed in this paper are the sole responsibility of the authors and do not necessarily reflect those of RIETI, METI, or any institution with which the authors are affiliated. [↑](#footnote-ref-1)
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