## An Incomplete Contract Approach to Vertically Integrated Multi-National Enterprises: A Hartian Modeling with 'Monotone Comparative Statics'\*

by

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## Abstract

Based on "Property Right Theory" by Grossman-Hart (1986) and Hart-Moore (1990), and with the powerful results in "Monotone Comparative Statics" by Topkis (1978), Milgrom-Roberts (1990), and Milgrom-Shannon (1994) in hands, we give a theoretical explanation for the emergence of vertically integrated multinational enterprises ("VMNEs"). We take a view that the emergence of "VMNEs" is due to the incompleteness of contracts, and is a way of internalizing "externalities" by bringing transactions within a firm through vertical integration, in an international world. Then, it will be important to compare the costs and benefits of a non-equity international production relationship ("Non-Integration") versus an equity-related multinationals ("VMNEs"). Without relying on any strong specification of the model and any simulation, by using the "Monotone Comparative Statics" technique, we have several propositions on the comparison between Non-Integration structure and Integrated Ownership structure (VMNEs). In that sense, this is the first paper that combines "VMNEs", "Property Right Theory", and "Monotone Comparative Statics".

Key Words. Vertically Integrated Multinational Enterprises (VMNEs), Property Right Theory, Asset Ownership, Monotone Comparative Statics.

JEL Classification C70, D23, F23, L22

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