Global Sourcing and Reorganization of Domestic Supply Chains*

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May 2, 2019

Abstract

We study how firms' global input sourcing decisions shape a country's domestic production networks. We develop a model in which heterogeneous firms source inputs from multiple industries located in different domestic regions and foreign countries. Input sourcing entails communication with suppliers, which is endogenously increasing in the differentiation of inputs. The model predicts that firms are less likely to source differentiated inputs, especially from distant domestic and foreign suppliers, due to costly communication. Triggered by foreign countries' export supply shocks, firms start offshoring inputs from foreign suppliers, which result in lower marginal costs and thus higher variable profits. The scale effect of offshoring induces firms to start sourcing inputs from the more productive and distant domestic suppliers within industries, but also from nearby suppliers in the more differentiated industries. The net effect of offshoring on the spatial structure of a firm's domestic production networks will depend on the relative strength of the two effects, which we verify using data for 4.5 million buyer-seller links in Japan. Based on a firm-level instrument, we find that after offshoring, firms are less likely to drop but more likely to add domestic suppliers, especially those located closer to the buyer than the existing ones and from the more differentiated industries. These results suggest that firms' offshoring may increase the geographic concentration of domestic production networks.

*The paper was previously circulated under the title "Offshoring, Relationship-Specificity, and Domestic Production Networks" (2015, RIETI Discussion Paper 15-E-122). The research is conducted as part of the Project "Global Markets and Japan's Industrial Growth" undertaken at the Research Institute of Economy, Trade and Industry (RIETI), and receives financial support from the JSPS KAKENHI Grants (No. 23243050, 26220503, 15K03456, and 16H03623). We thank the Ministry of Economy, Trade and Industry for providing the micro data of the Basic Survey of Japanese Business Structure and Activities, and RIETI for granting us access to the Tokyo Shoko Research data. We thank Pol Antràs, Andy Bernard, Matilde Bombardini, Masahisa Fujita, Yukiko Ito, Keith Head, Sam Kortum, Hiro Kasahara, Pravin Krishna, Masayuki Morikawa, Andreas Moxnes, Yukiko Saito, Tim Schmidt-Eisenlohr, Yasuyuki Todo, Felix Tintelnot, Daniel Trefler, Jonathan Vogel, Ryuhei Wakasugi and participants at various seminars and conferences for comments. Tran Lam Anh Duong, Hiroki Ichimiya, Hayato Kato, and Kenji Suganuma provide excellent research assistance. All errors are our own.

Keywords: production networks; global sourcing; offshoring; face-to-face communication; industry agglomeration

JEL codes: D22, D85, F14, L10, L14, R12