Information and Communication Technology and Firm Geographic Expansion*

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Abstract

Information and communication technology (ICT) can widen firms' geographic span of control by reducing internal communication costs. Combining comprehensive establishment-level datasets with ownership linkages, geographic locations, and ICT adoption, I document that firms with more advanced technology have both higher within-firm communication and larger geographic coverage. Exploiting natural experimental variation from the Internet privatization in the early 1990s, I show that better access to ICT helped firms expand geographically. Using a model where firms endogenously adopt ICT, choose multiple production locations, and trade domestically, I estimate that the Internet privatization increased overall efficiency by 1.1%. Compared to a trade-only model, a model with multi-unit firms predicts that efficiency gains are larger and more geographically dispersed. Policy counterfactuals show that to improve local welfare, a policy coordinated across locations that improves ICT access can be more effective than uncoordinated local policies.

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