

Authors

Tarek Ghani
Washington University in Saint Louis

Tristan Reed
World Bank

American Economic Journal: Microeconomics 2022, 14 (1): 130–165
<https://doi.org/10.1257/aer.20190106>

Relationships on the Rocks: Contract Evolution in a Market for Ice¹

By TAREK GHANI AND TRISTAN REED²

Firms use relational contracts to support repeated trade. Do these informal agreements evolve in response to market conditions? In a market for ice, firms reestablish relationships on new terms when a prior agreement breaks down. Using transaction data, we show that ice retailers prioritize deliveries to loyal buyers—fishing firms—when supply from the monopolistic manufacturer is scarce. After an upstream shock to competition increases supply, repeated trade lapses, threatening retailers' positions. Incumbent retailers establish a new agreement expanding trade credit to loyal buyers, which impedes new retailer entry. Upstream competition also increases downstream firms' productivity and lowers consumer fish prices. (JEL D24, D86, L12, L14, L81, O14, Q22)

Economic relationships are observed as repeated trade between agents. Starting with Coase (1937), the literature on relationships has focused on the so-called “make or buy decision”—the choice to procure inputs either through spot markets or through vertical integration. Baker, Gibbons, and Murphy (2002) argue that relational contracts—informal, reciprocal agreements sustained by the value of future repeated trade—are a third organizational form that may provide more flexibility than vertical integration and more stability than spot market transactions. A broad lesson of this literature is that as markets develop, relational contracts become difficult to sustain. For example, when outside options improve on the spot market, making a particular reciprocal agreement less attractive to one party, the standard model predicts that the agreement will lapse (cf. Kramton 1996).

¹Ghani: Olin School of Business, Washington University in St. Louis (email: tghani@wustl.edu); Reed: Development Research Group, World Bank (email: treed@worldbank.org). John Akerlof was coeditor for this article. We are grateful to Tom Coates, Niall O'Connell, and the Ice for Baby team for assistance in implementing the project. Athay Jaoja, Anthony Mwanery, Osman Nabay, James Pitt, and the Sierra Leone country team at Innovations for Poverty Action provided excellent research assistance. Lorenzo Casabini, Ernesto Dal Bo, Marcel Fackler, Mike Forbes, Robert Gibbons, Mattias Goldstein, Jesse Goff, Cheng Tat Ho, Aaron Igar, Khorja, Eusebio Macchiarini, Edward Miguel, Dilip Mookherjee, Anant Murgaria, Andrew Newman, Lamar Porter, Andrea Prat, Stephen Ryan, Andrei Shleifer, Trevor Sutt, Steven Tadelis, Oliver Williamson, Christopher Woodruff, Noam Yuchtman, Owen Zidar, and many other colleagues provided insightful feedback. We thank seminar audiences at Berkeley Summer Forum, Berkeley, BC, Chicago, Duke, Harvard, NBER, Organizational Economics, Northwestern, Stanford Institute for Theoretical Economics, and Washington University. Support was provided by the Clavin Center for International Business and Policy, the International Growth Center, the Private Enterprise Development in Low-Income Countries Initiative, and the Weiss Family Fund for Research in Development Economics. An earlier version of this paper circulated with the title “Competing for Relationships: Markets and Informal Institutions in Sierra Leone.” The research described in this paper was approved by the IRB at UC Berkeley as Project 2014-01-8951.

²Go to <https://doi.org/10.1257/aer.20190106> to visit the article page for additional materials and author disclosure statement(s) or to comment in the online discussion forum.

E30

Relationships on the Rocks: Contract Evolution in a Market for Ice

The paper proceeds as follows: in Section I, we describe Sierra Leone’s ice industry and the shift in market structure that we exploit for variation. This section describes the basic effect of entry into ice manufacturing on ice and fish quantities and prices. Section II describes the data used in the analysis of relational contracting. Section III presents our core results, quantifying the effect of ice manufacturer entry on outcomes in the ice retail market including supply assurance, trade credit, and loyalty. Section IV concludes.

February 01, 2022