Information Frictions and the Law of One Price: “When the States and the Kingdom became United”

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Abstract

How do information frictions distort international trade? Since information flows are complex, usually unobserved and endogenous, empirical evidence on this question is scarce. This paper exploits a unique historical experiment to shed light on these issues: the establishment of the transatlantic telegraph connection in 1866. I use a newly collected dataset based on historical newspaper records that provides daily data on information flows across the Atlantic together with detailed, daily information on cotton prices and trade flows. Information frictions result in large and volatile deviations from the Law of One Price. Average trade flows increased after the telegraph and became more volatile, providing a more efficient response to demand shocks. I provide a model of international trade that is consistent with the empirical evidence: In the model, exporters use the latest news about a foreign market to forecast expected selling prices when their exports arrive at the destination. Their forecast error is smaller and less volatile the more recent the available information. Based on the model I estimate the welfare gains from the telegraph to be equivalent to those from abolishing a roughly 6% ad valorem tariff.

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