1099-91-247 Nick Foti and Scott D. Pauls* (scott.pauls@dartmouth.edu), 6188 Kemeny Hall, Dartmouth College, Hanover, NH 03766, and Daniel Rockmore. Systemic Risk: Robustness and Fragility in Trade Networks.

We explore systemic risk in an organic system which changes and evolves over time, the World Trade Web (WTW). Our goal is to better understand the risk that a country exposes itself to through mere participation in trade. We find situations where participants in the WTW are exposed to risk no matter what choices they make or safeguards they put in place.

We have two main findings. First, the WTW is robust to relatively small shocks but not to larger ones. Second, for small shocks, increasing edge density correlates with increasing robustness while for large shocks, the opposite is true. This supports the view that globalization, as witnessed by growing edge density, increases the ability of a system to absorb shock up until a certain size, whereupon the shock overwhelms the system and sparks a broader contagion. (Received February 10, 2014)