Business Relationships, Trade Credit, and Idiosyncratic Shocks

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Abstract

This paper presents a model of the joint determination of trade credit and business relationships and shows how they responded to the supply-chain disruptions in the Covid-19 pandemic. In a frictional, decentralized market for inputs, final-good retailers and input suppliers form durable business relationships, which support endogenous trade credit through punishment. Retailers who default lose access to inputs and forego production while searching for a new match. Using corporate 10-K disclosures of business relationships, along with financial data from Compustat, the model is calibrated to match 2019 data on trade credit and matching: trade credit finances between 50% and 66% of business-to-business sales and matching rates are 32% annually. In 2020 and 2021, business relationships were destroyed at 13% and 21% higher rates than the ten-year average. As a result of elevated relationship risk, model-predicted business-to-business sales decline 37% and output declines 23% in 2020. Had trade credit not declined, counterfactual business-to-business sales and output would have only fallen 16.8% and 7.9%, respectively. In total, the tightening of trade credit for 10-K firms cost $147b in business-to-business sales and $268b in output (1.3% of U.S. GDP in 2020).

Keywords: business relationships, trade credit

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