The Macroeconomics of Trade Credit

BOCOLA AND BORNSTEIN

Discussion by Thomas Drechsel (University of Maryland)

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WHAT IS TRADE CREDIT?

- One firms makes tables, another firms makes wood
- ▶ Table firm buys wood from wood firm for amount *X*
 - Pays αX immediately
 - ▶ Promises to pay $(1 \alpha)X$ later

 $(1-\alpha)X = \text{loan from wood firm to table firm} = \text{"trade credit"}$

WHAT DO WE LEARN ABOUT TRADE FROM THIS PAPER?

- ► How trade credit relationships arise
 - 1. As a solution to a problem
 - 2. Simultaneously and in interaction with bank credit
- How trade credit impacts the macroeconomy
 - Financial shocks amplified or dampened
 - Depends on wood firm's access to bank credit

HIGHLIGHTS OF THIS PAPER

- ► Thinks *deeply* about trade credit
- Elegant exposition
- ► Careful quantitative evaluation with Italian micro data

PLAN FOR MY DISCUSSION

- 1. Positioning in the literature
- 2. What we learn about bank credit
- 3. Commonality in financial shock across firms

POSITIONING IN THE LITERATURE

- ► Large (macroeconomic) literature about trade credit
 - ► Started decades ago: Schwartz (1974)
 - Has continued recently: Reischer (2019), Garcia-Marin, Justel, and Schmidt-Eisenlohr (2020), Hardy, Saffie, and Simonovska (2023)
- ► Large literature generally about "credit frictions amplify macroeconomic shocks"
 - ▶ Here, like in many papers, action goes through labor wedge
 - ► See Quadrini (2011) for a nice discussion

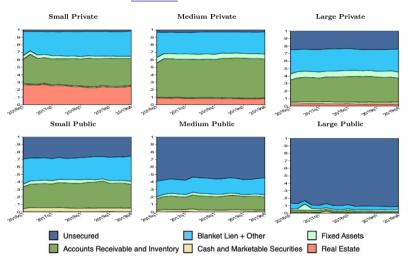
POSITIONING IN THE LITERATURE

- ▶ To me, the key contribution of this paper is the **depth of the theory**
 - 1. Trade credit as a solution to an underlying problem
 - 2. Trade credit in interaction with bank credit
- ▶ I would more clearly emphasize this from the start

WHAT WE LEARN ABOUT BANK CREDIT

- ▶ Both table firms and wood firms can borrow from banks
- 'Morning-afternoon' structure creates inherent connection between
 - how both firms borrow from banks and
 - 2. trade credit links between the firms
- lacktriangle Obtaining bank debt pprox pledging fraction of accounts receivable

WHAT WE LEARN ABOUT BANK CREDIT



► From Caglio, Darst, and Kalemli-Ozcan (2021), using Fed's Y14Q data

WHAT WE LEARN ABOUT BANK CREDIT

- Empirically, accounts receivable commonly serve as collateral in bank loans
 - Interesting heterogeneity across firms (Caglio, Darst, and Kalemli-Ozcan, 2021)
 - E.g. more important for medium-sized and private firms
 - But no empirical link to trade credit has been made (as far is I know)
- Potentially this is another, very interesting testable prediction of the model
- ▶ Is bank credit backed by accounts receivable predominately extended to firms that have trade credit relationships with other firms?

COMMONALITY IN FINANCIAL SHOCK

- Spot economy
 - ► Table firm: $p^s \leq [\delta + (1 \delta)(1 \tilde{\theta})]x^{\eta}$
 - ightharpoonup Shock to $ilde{ heta}$ acts like "familiar" distortion to labor wedge
- ► Trade credit economy
 - ▶ Table firm: $p^s \leq [\delta + (1 \delta)(1 \tilde{\theta})]x^{\eta}$
 - Nood firm: $Wx p^s = (1 \tilde{\theta})p^{tc}$
 - Only when $\tilde{\theta} > \bar{\theta}$ in second equation (wood firm constrained): shock to $\tilde{\theta}$ acts through first equation in "familiar" way
 - ightharpoonup But shock also hits $\tilde{\theta}$ in second equation, it <u>further</u> constrains the wood firm
- lacktriangle In principle, financial shocks could differ between table and wood firm $(ilde{ heta}
 eq ilde{ heta})$
 - Expositionally, this might add further clarity by separating two distinct effects

CONCLUSIONS

- Insightful paper
- ▶ Made me think deeply about trade credit and bank credit
- Can still sharpen the positioning in the literature and some of the characterization
- ► Additional testable predictions about link between trade credit and bank credit?

BIBLIOGRAPHY

- CAGLIO, C. R., R. M. DARST, AND S. KALEMLI-OZCAN (2021): "Collateral Heterogeneity and Monetary Policy Transmission: Evidence from Loans to SMEs and Large Firms," Working Paper 28685, National Bureau of Economic Research.
- GARCIA-MARIN, A., S. JUSTEL, AND T. SCHMIDT-EISENLOHR (2020): "Diversion Risk, Markups and the Financing Cost Advantage of Trade Credi," *Board of Governors of the Federal Reserve System, International Finance Discussion Papers.*
- HARDY, B., F. E. SAFFIE, AND I. SIMONOVSKA (2023): "Trade Credit and Exchange Rate Risk Pass Through," Working Paper 31078, National Bureau of Economic Research.
- QUADRINI, V. (2011): "Financial frictions in macroeconomic fluctuations," *Economic Quarterly, Federal Reserve Bank of Richmond*, 97, 209–254.
- Reischer, M. (2019): "Finance-thy-neighbor: Trade credit origins of aggregate fluctuations," *University of Cambridge Job Market Paper*.
- SCHWARTZ, R. A. (1974): "An economic model of trade credit," *Journal of financial and quantitative analysis*, 9, 643–657.