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Thoughts on Trade Credit: With an Eye on China and India

Christopher G. Lamoureux
Diamond Professor of Finance
University of Arizona
(520) 621-7488
lamoureu@lamfin.eller.arizona.edu

October 11, 2013

Regulators' Perspectives

Start by noting the schizophrenia in regulating trade credit.

The Good April 2009 G20 summit in London agrees to increase trade credit through official Export Credit Agencies by $250 billion.

The Bad EU adopts directive to reduce maximum payment terms–arguing that small & medium size companies may finance a disproportionate share of trade credit at the cost of lower growth.

- Walmart prototype.
- Two Experiments:

Two Recent Experiments

Jan 2006: French trucking firms restricted to 30-day maximum AR terms.
Effects:

1. 15% drop in industry trade credit.
2. Financially strong truckers experience drop in profitability.
3. Smaller (financially constrained?) truckers invest more, experience a big drop in default risk.
4. Smaller (financially constrained?) trucking customers experience large drop in payables–offset by shrinking inventory.

- Implications: Large firms use generous trade credit as a competitive tool to restrict new competitors' entry (and smaller competitors' expansion).

Second Experiment

Jan 2007: One of Chile's major grocery chains agrees to curtail payment terms to small suppliers to 30 days. Large suppliers not affected.
Effects:

1. Affected suppliers' prices lowered by 5-10%.
2. –Equivalent to a 31 - 55% interest rate.
3. –(Contrasting with bank rates of 7 - 11%.)

- Implications: (Entrenched) monopsonist extracts value from suppliers by demanding trade credit (à la Walmart). Since some of this value is in the form of warranty, when forced to monetize, the implied rate exceeds market interest rates.

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Ordinary Times

- Stylized Facts
  - Suppliers of *differentiated* products/services extend more trade credit.
  - Users of trade credit have access to distant banks.
  - A majority of firms use trade credit and at low cost. (Only a minority get early payment discounts.)
- Inference: Trade credit is more important as a commitment mechanism (warranty) than as a source of finance
  - Buyer can verify quality before paying.
  - Large buyers exercise bargaining power by demanding longer trial periods.
- But: A bank is in better position to monitor and re-negotiate / force bankruptcy.

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Evidence from the Crisis

A recent study uses the drop in bank lending from June 2007 through June 2008 to isolate a drop in available credit. Finds:

- Firms with large cash reserves experience a large increase in A/R.
- These firms had better performance than competitors who did not enter the crisis with large cash holdings.
- Buyers substitute trade credit for bank debt.
- Perhaps a small piece of the puzzle of corporate cash holdings.

Mining

In the spirit of this study, I looked at Freeport McMoran and Alcoa through the crisis.

- On 12/31/2006:
  - Cash as % of TA: AA: 1.4%; FCX: 17%.
  - A/R Turnover: AA: 10.6; FCX: 11.1.
  - A/R as % of TA: AA: 8.4; FCX: 7.8.
- 12/31/2009:
  - Cash as % of TA: AA: 3.9%; FCX: 10.2%.
  - A/R Turnover: AA: 10.8; FCX: 15.9.
  - A/R as % of TA: AA: 4.0; FCX: 5.8.
- Avg. Annual Sales Growth 2008 and 09: AA: -20%; FCX: -5%.
- No evidence that FCX used its cash holdings to increase receivables during the crisis.

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China

- China has excellent supply of savings to financial sector.
- However, the financial sector is grossly inefficient.
- Growth in China primarily occurs in the *private sector* – as distinct from state-owned or *listed*.
- Largest source of capital to private firms is "self-financing."
- Private firms account for 52% of GDP, but only 27% of outstanding loans.
- Banking system suffers from operational inefficiencies and lack of information.
- First national credit bureau was set up in 2006.
- Bond market is virtually non-existent.
- Banks intermediate 3/4 of economy.

China – What's Next?

- Unfortunately, impossible to predict since China is unique.
  - Its legal system is neither (British) common law, or (French) civil law, it lacks religious norms.
  - Banking system has been stabilizing– and trade credit shrinking.

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India

- Overarching characteristic: Corruption, and lack of reliance on the legal system for contract enforcement.
- Rapid economic growth generally not a function of access to bank and market finance.
- Consistent with stylized facts from US, we see much more trade credit used by unlisted firms than those listed on the stock exchange, and much more in the service sector than in the manufacturing sector.
- Relationships and reputations matter.
- Banks are fairly well developed in India.

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India – What's next?

- India is a puzzle because it has a tradition with English Common Law, but it does not work.
- A possible explanation is the enormity of the country.
- As with China, there is no analog for development.

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Managing Risk of Trade Credit

Available tools:

- Letter of Credit.
- Factoring A/R (without recourse).
- Derivatives (e.g., CDS on customer).
- Insurance.

I am opposed to all of these–assuming that contracts and incentives are thoughtful. One of the main reasons: You have better information about your customers than insurers. Key: Extract the value in that information.

Untapped Value

In China, your data on payment histories is very valuable.
Example: Shell China teamed with China Merchants Bank:

- Shell screened distributors to identify reliable firms with 5 years of purchase history.
- Some 100 distributors screened.
- 30 have passed Bank's tests.
- Shell provides this information to hina Merchants Bank, who in turn lends to the distributors–to pay Shell.
- The loaned proceeds must be used to pay Shell.
- Shell agrees with the Bank that if the bank notifies Shell that the distributor is in default, Shell stops providing products to that distributor.

Untapped Value –2–

The same should work in India. Indian banks have a long tradition of providing letters of credit and factoring and rediscounting. The difference is that the Indian banks should have good information on their customers. In this case, partnering with a bank could involve gaining access to their information, in exchange for the financing business.

Thanks and Additional Readings

French Trucking Jean-Noël Barrot (2013) Financial Strength and Trade Credit Provision: Evidence from Trucking Firms, PhD Thesis, HEC Paris.

Chilean Grocers Emily Breza and Andres Liberman (2013) The Effect of Trade Credit on Product Markets: Evidence from the Suppliers of a Large Supermarket, Working Paper, Columbia University.

Ordinary Times Mariassunta Giannetti, Mike Burkart, and Tore Ellingsen (2011) What You Sell is What You Lend? Explaining Trade Credit Contracts, *The Review of Financial Studies*.

The Crisis Emilia Garcia-Appendini and Judit Montoriol-Garriga (2013) Firms as Liquidity Providers: Evidence from the 2007-208 Financial Crisis, *Journal of Financial Economics*.

Thanks and Additional Readings –2–

India

- Franklin Allen, Rajesh Chakrabarti, Sankar De, Jun Qian, Meijiun Qian (2012) Financing Firms in India, *Journal of Financial Intermediation*.
- Professor Jayant Kale, Georgia State University. (Personal Correspondence.)

China

- Meghanna Ayyagari, Asli Demirgüç-Kunt, and Vojislav Maksimovic (2010) Formal versus Informal Finance: Evidence from China, *The Review of Financial Studies*.
- Robert Cull, Lixin Colin Xu, and Tian Zhu (2009) Formal Finance and Trade Credit During China's Transition, *Journal of Financial Intermediation*.
- McKinsey Global Institute (2006) Putting China's Capital to Work: The Value of Financial System Reform.

Thanks and Additional Readings –3–

Shell China I-Ching Ng (2012) Shell China's New Supply Chain Financing Strategy, *The Corporate Treasurer*.