Funding Liquidity without Banks

by Restrepo F., Cardona-Sosa L. and Strahan P.

Discussion by
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What does the paper do?

- Effect of increase in **cost** of short-term credit on:
  - short-term credit (-)
  - cash (+)
  - trade credit (+)
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- Empirical strategy:
  - time-series: 2011 Tax Reform in Colombia
  - cross-section: below/above 15,000 COP cutoff
    → heterogeneous effects: by size

Finding: substitution when trade credit less available → Investment ↓
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Great natural experiment (change cost of one specific credit category without macro-shock to financial system)

Convincing results, polished writing, lots of robustness.. (v27!)
Overall

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Main Comments:

- Institutional Setting
- Empirical Strategy
- Discussion of Results
BAD = Bank Account Debit Tax

- 0.4 % tax on withdrawals from bank accounts (since 1999)
- 2011 Reform: Tax does not change.
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- 0.4 % tax on withdrawals from bank accounts (since 1999)

- 2011 Reform: Tax does not change. What changes is ability of large firms to get around it:
  - before: can avoid tax using Treasury Facilities
  - after: stop this practice
BEFORE 2011:
WORK-AROUND not to pay the BAD tax

1. Borrows short term from Bank X through “Treasury Facilities”
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Firm A
Sales > 15,000 COP

Firm A investment account
Firm A checking account

1. Borrows short term from Bank X through “Treasury Facilities”

Firm B

Firm B Bank account

2. Direct deposit

BANK X
BEFORE 2011:
WORK-AROUND not to pay the BAD tax

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3. Repayment
At maturity

Firm A
Sales > 15,000 COP

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Firm A checking account

Firm B
Bank account

BANK X
1. Firm A borrows short term from Bank X through normal short-term debt
AFTER 2011:

1. Firm A borrows short term from Bank X through normal short-term debt.

2. Bank deposits

Firm A:
- Sales > 15,000 COP
- Investment account
- Checking account

Bank X

Firm B:
- Bank account
After 2011:

1. Firm A borrows short term from Bank X through normal short-term debt.

2. Bank deposits

3. Payment

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TAX
AFTER 2011:

1. Firm A borrows short term from Bank X through normal short-term debt.

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3. Payment

4. Repayment At maturity

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TAX
Comments on Institutional Setting

Complex (5 pages...).

1. Treatment: maturity of a loan vs payment schedule. e.g. long term debt can be paid in monthly installments.
2. Role of investment accounts. Can firms still use them after 2011?
3. "Other changes" to tax code in 2011 need discussion. Affect differently firms of different size? Any discontinuity at "preferential client" threshold?
Comments on Institutional Setting

Complex (5 pages...). A few points to clarify:

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Can firms still use them after 2011?

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Empirical Strategy

- Heterogeneous treatment effect of the 2011 Tax Reform

**before**

**after**
Empirical Strategy

- Heterogeneous treatment effect of the 2011 Tax Reform

**before**

- Treatment
- Control

**after**

- Treatment
- Control
Empirical Strategy

- Heterogeneous treatment effect of the 2011 Tax Reform

Before and after graphs showing the mean of bank loans for sales within the cutoff (COP millions) for treatment and control groups. The graph on the left shows a positive correlation between sales and bank loans for the treatment group before the tax reform, while the graph on the right shows a decline in the mean of bank loans for the treatment group after the tax reform.
Empirical Strategy: Comments

- Why strong heterogeneous effects among firms above cutoff
  - tax rate is not progressive
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2. Large differences in observables across firms *above* cutoff: See coefficient of variation for: investment, profitability, size
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3. Suggestion: standard RDD seems more natural approach
   - allow to compare firms of similar size
   - smoothness around cutoff in other observables: testable
   - there is a clear discontinuity at the threshold!
Issuance of ST Debt around Cutoff

before

after
Issuance of ST Debt around Cutoff

before

after
Issuance of ST Debt around Cutoff

before

after
Issuance of ST Debt around Cutoff

before

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Issuance of ST Debt around Cutoff

before

after
Discussion of Results

Additional outcomes:
- vertical integration
- informality
- alternatives to banking sector (fintech?)
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   - informality
   - alternatives to banking sector (fintech?)

2. Results suggest substitution with trade credit almost seamless.
   - is it really?
     - back of the envelope quantification
   - intensive vs extensive margin of trade credit
     - relationships already in place for large firms?
     - upfront costs: negotiating contractual terms, building trust
To Sum up

- Fascinating results
- Well written paper
- Some suggestions for empirical strategy and discussion