### Funding Liquidity without Banks

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

Discussion by Jacopo Ponticelli - Northwestern

BIS CCA Research Conference, 2018

## 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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  - cross-section: below/above 15,000 COP cutoff
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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  $\rightarrow$  Investment  $\downarrow$

#### Overall

- Great natural experiment (change cost of one specific credit category without macro-shock to financial system)
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#### Main Comments:

- Institutional Setting
- Empirical Strategy
- Discussion of Results

## Breaking the BAD Tax Reform



#### BAD = Bank Account Debit Tax

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

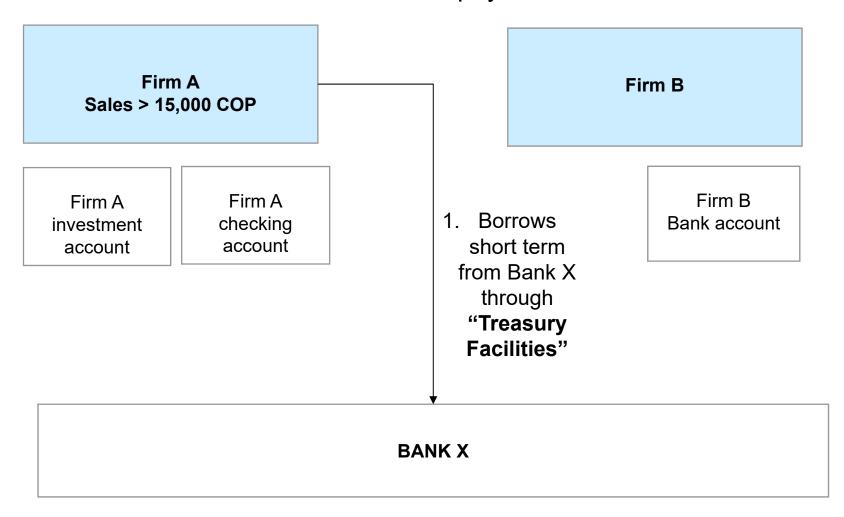
## Breaking the BAD Tax Reform



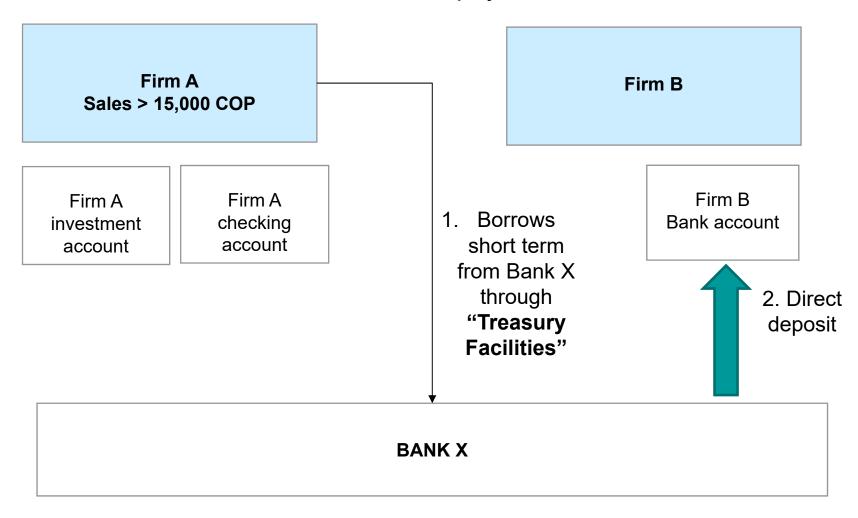
#### BAD = Bank Account Debit Tax

- 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

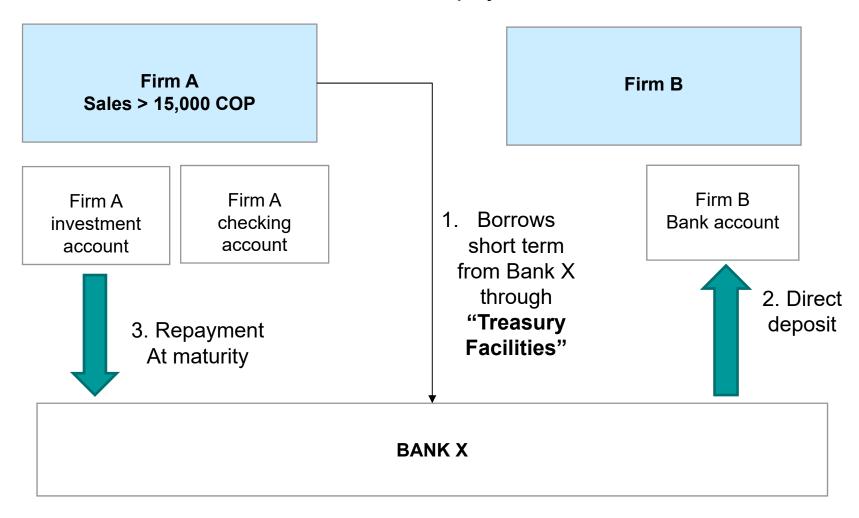
# BEFORE 2011: WORK-AROUD not to pay the BAD tax

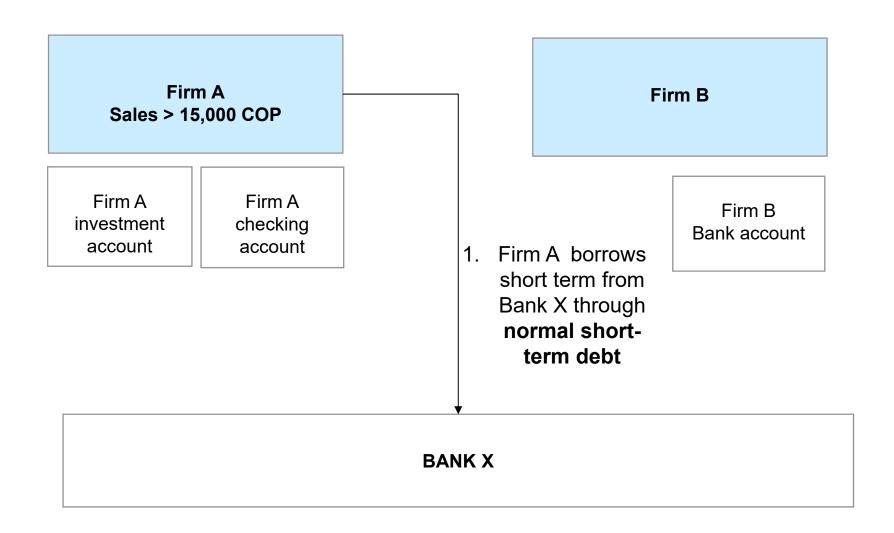


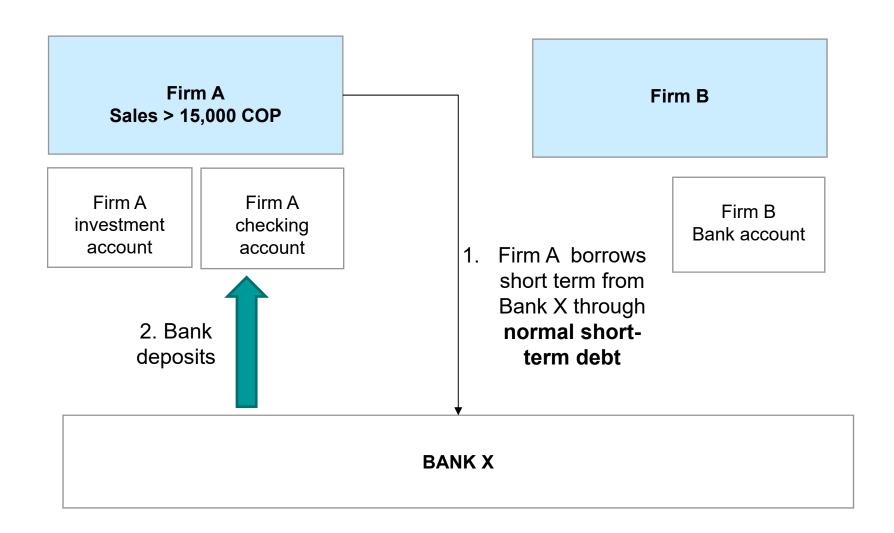
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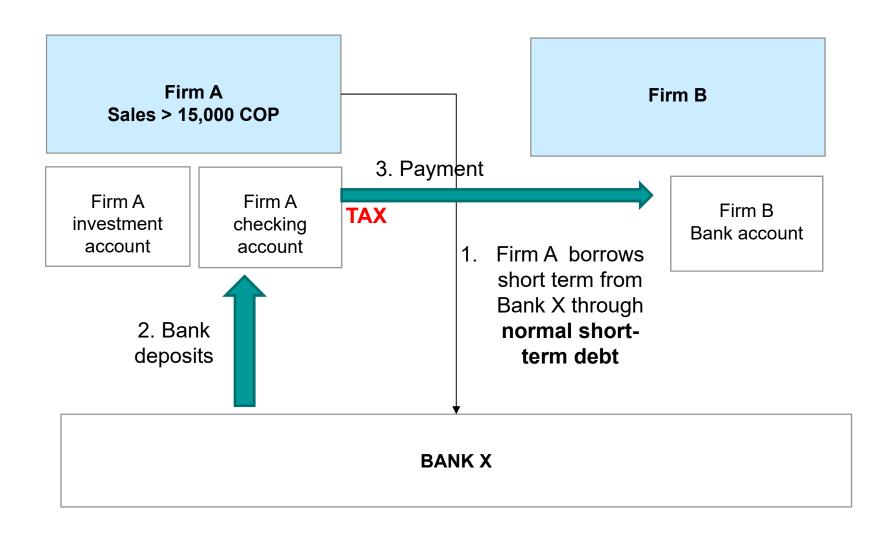


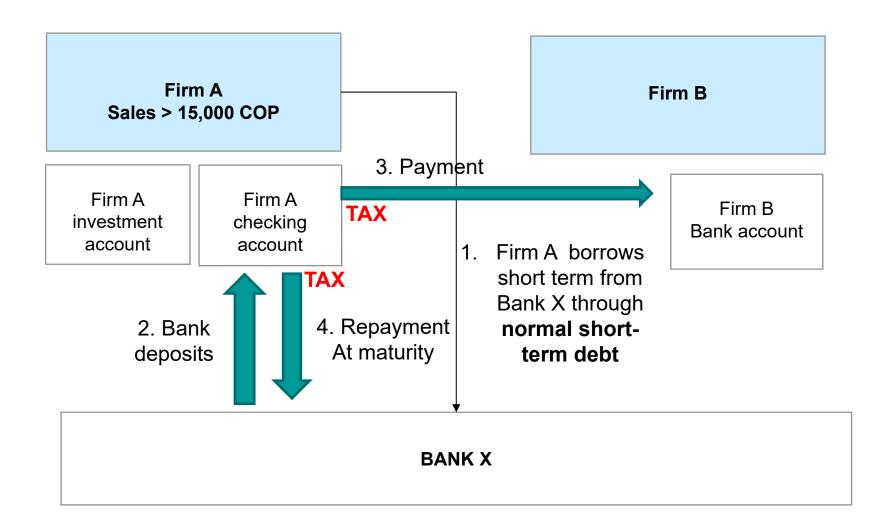
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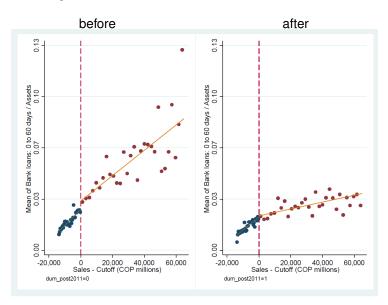
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- Treatment: maturity of a loan vs payment schedule
  - e.g. long term debt can be paid in monthly installments
- Role of investment accounts
  - Can firms still use them after 2011?
- Other changes" to tax code in 2011 need discussion
  - Affect differently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

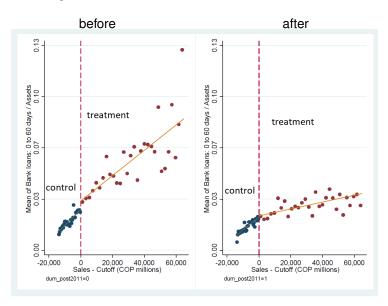
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Heterogeneous treatment effect of the 2011 Tax Reform



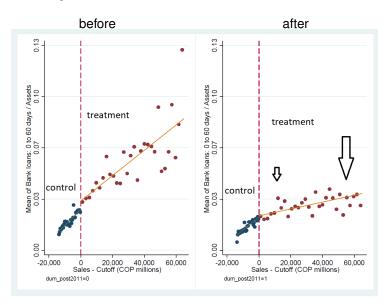
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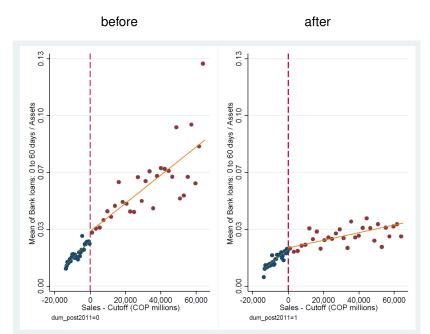
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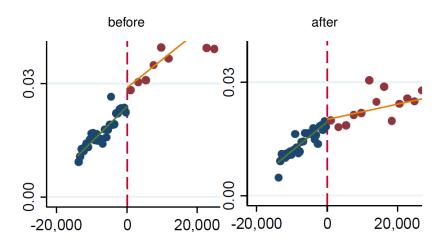
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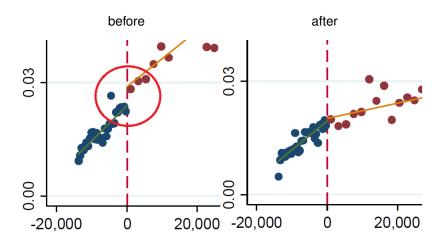
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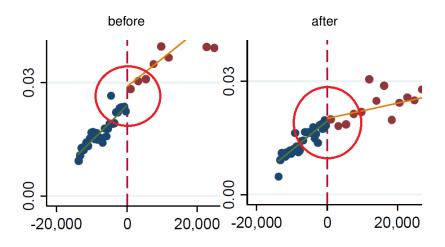
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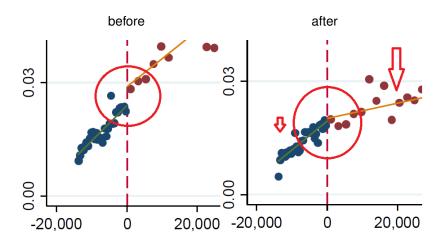
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  - smoothness around cutoff in other observables: testable
  - there is a clear *discontinuity* at the threshold!











#### Discussion of Results

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

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