

High-Speed Internet, Financial Technology and Banking

Discussion by Martin Brown
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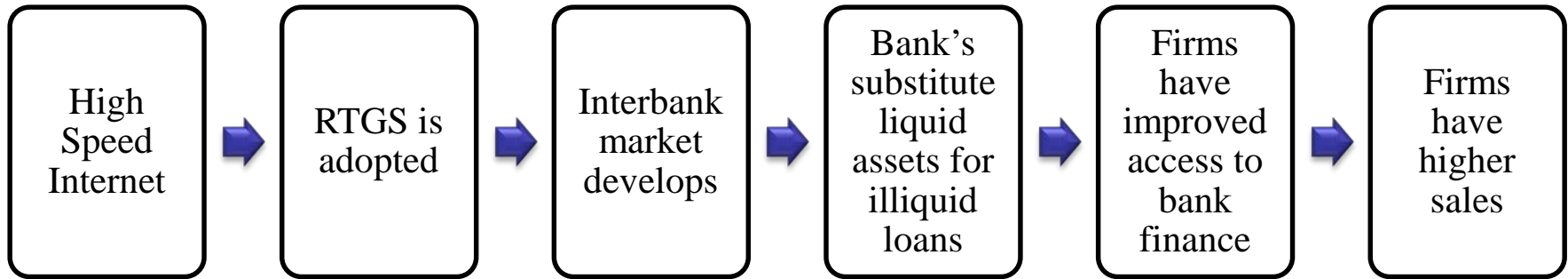
BIS-BoE-CEPR Virtual Meeting, September 2020

Method & Findings

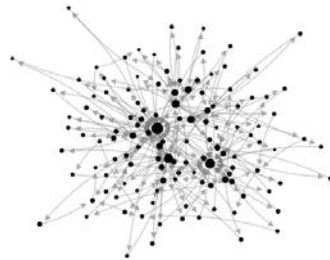
- High-speed internet connection leads to
 - introduction of RTGS
 - development of interbank lending
 - bank asset transformation .. more loans, less liquid assets
 - increase in private sector credit supply
- Exploit staggered hook-up of African countries to sub-marine internet cables between 2000 and 2013



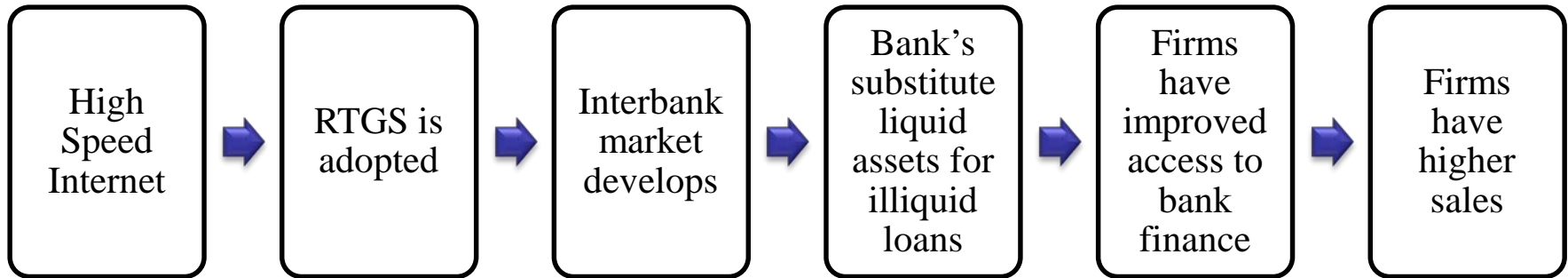
Narrative / Causal Chain



Estimated interbank network



Question of interest?

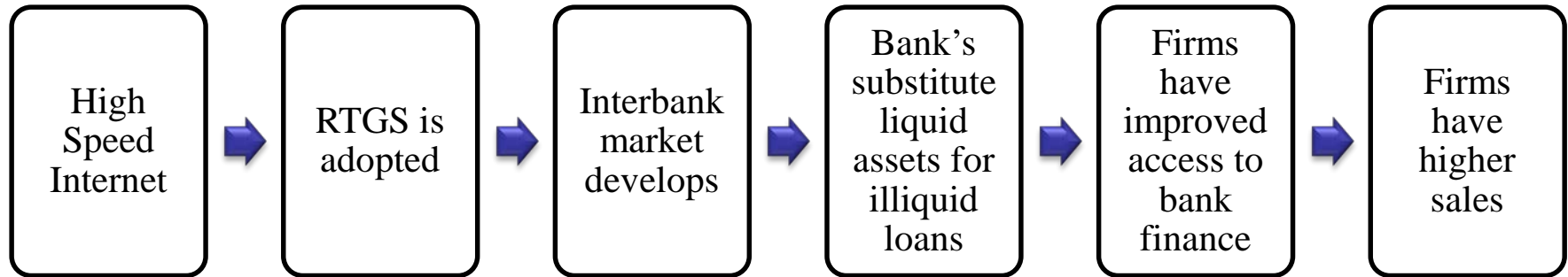


Does internet access affect financial technology ?

How does money market development impact on credit supply ?
(and firm performance)

How does financial technology affect money markets ?

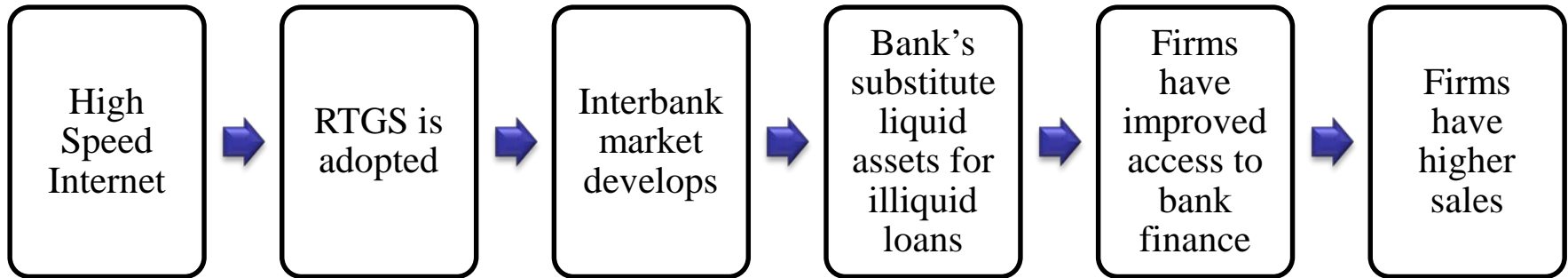
Contribution ?



How does money market development impact on credit supply ?
(and firm performance)

- Literature on interbank market freeze during 2007-2009 crisis ?
 - Cingano et al. RFS 2016
 - Iyer et al RFS 2014

(Financial) technology as instrument



How does money market development impact on credit supply ?
(and firm performance)

- Is RTGS crucial to money market access for most banks?
- Is bank liquidity management the only transmission channel to credit provision?

Is RTGS crucial for everyday interbank transactions?



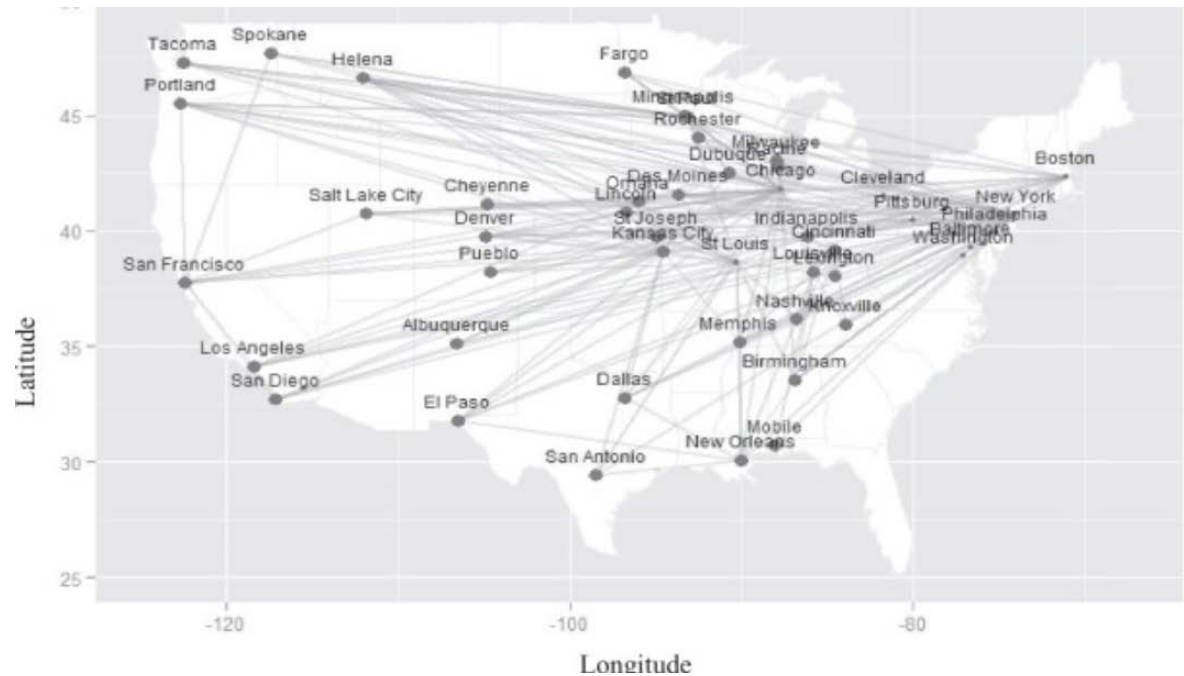
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Journal of Financial Economics

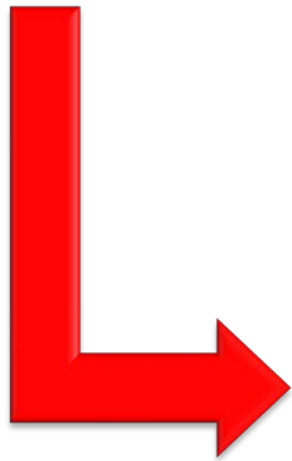
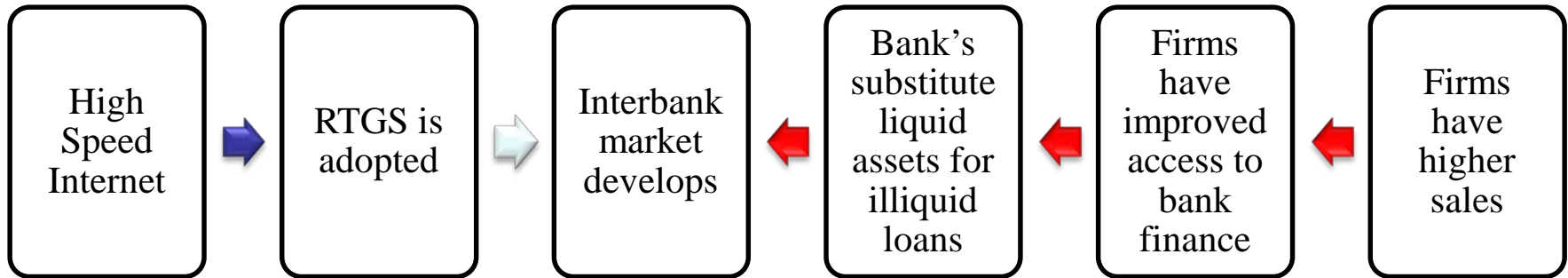
Volume 125, Issue 3, September 2017, Pages 434-453



Interbank networks in the National Banking Era: Their purpose and their role in the Panic of 1893 ☆



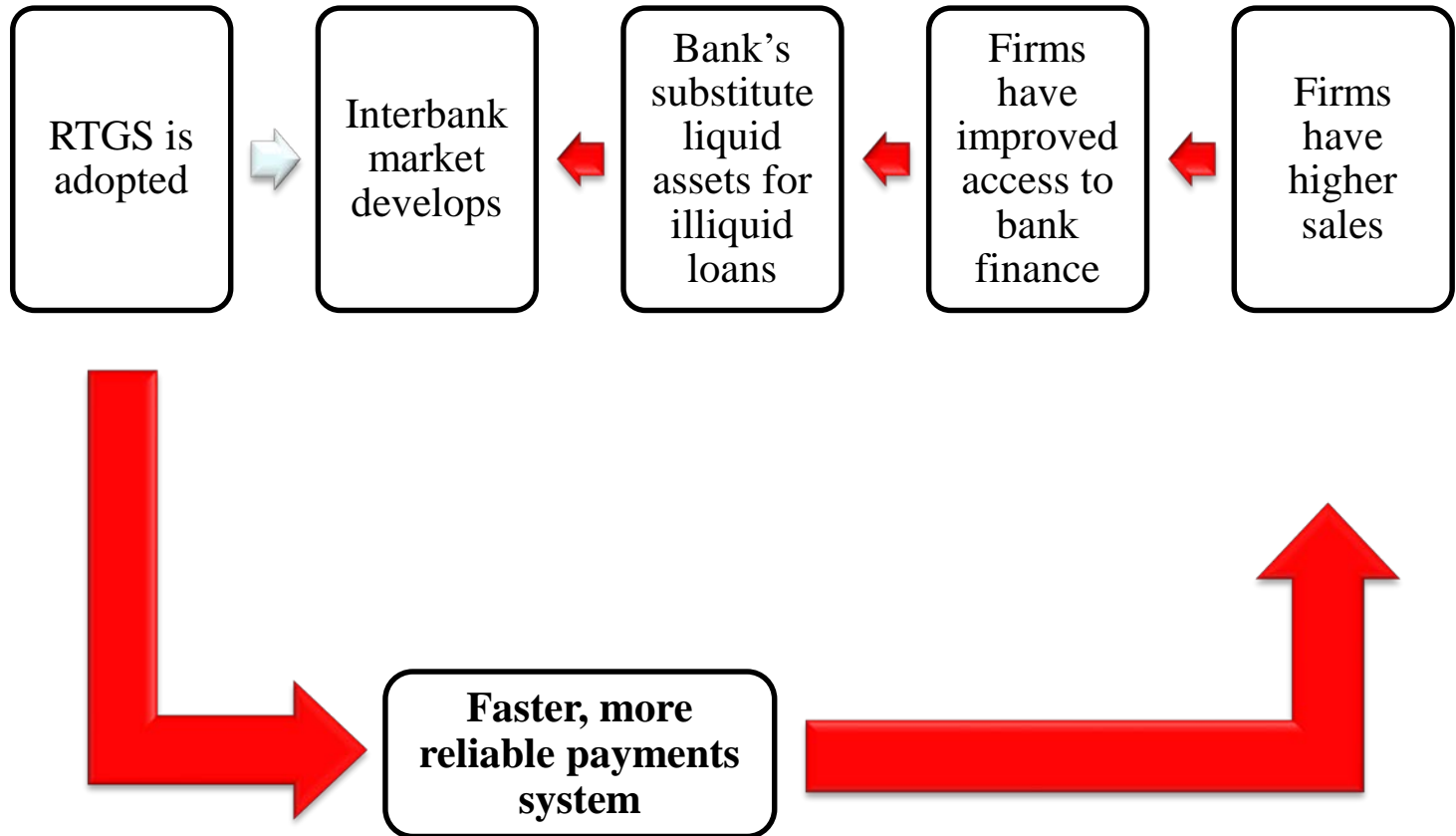
Alternative channel 1



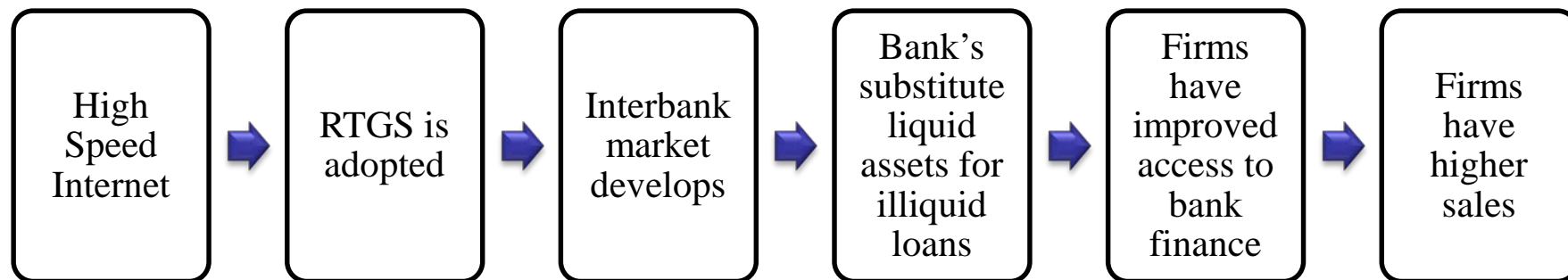
Demand / supply side shock



Alternative channel 2



Support the narrative



- Document weak interbank market / liquidity risk prior to RTGS
- Document that liquidity risk seriously constrained bank lending prior to RTGS

Discuss / rule out alternative channels

- Document increase in credit supply rather than credit demand
 - discouraged / rejected borrowers
 - interest rates / spreads decline ?
- Document increase in lending to clients which benefit the least from IT /payments improvements

Further comments

- (most) dependent variables are not normalized by bank size
 - just capturing expansion of banking sector ?
- Event study (-5 / +5 years) method seems to truncate data (only observe country in full if hooked up in 2005-2008)
- Why do you need the ML exercise ? ..