

Bank Lending in The Age of Digital Disruption

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FINTECH AND BANKING. FRIENDS OR FOES?

FROM THE EDITORIAL DESK

FinTech and Banks: Friends or Foes? by Giorgio Barba Navaretti, Giacomo Calzolari and Alberto Franco Pozzolo

Numbers by José Manuel Mansilla-Fernández

Institutions by José Manuel Mansilla-Fernández

A Bird Eye (Re)view of Key Readings by José Manuel Mansilla-Fernández

ARTICLES

Digital Disruption and Bank Lending by Jean Dermine

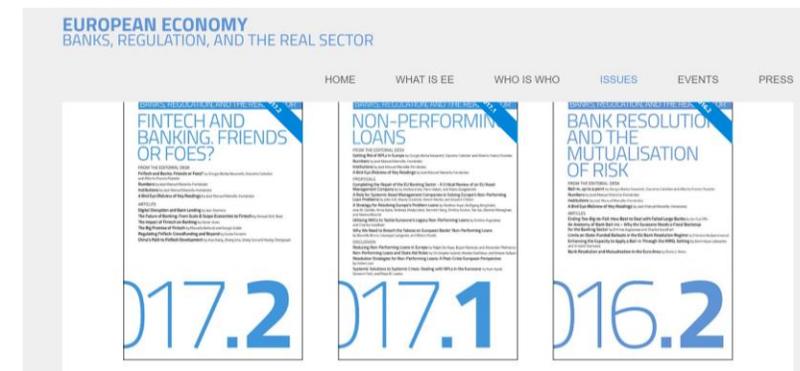
The Future of Banking: From Scale & Scope Economies to Fintech by Arnoud W.A. Boot

The Impact of Fintech on Banking by Xavier Vives

The Big Promise of Fintech by Marcello Bofondi and Giorgio Gobbi

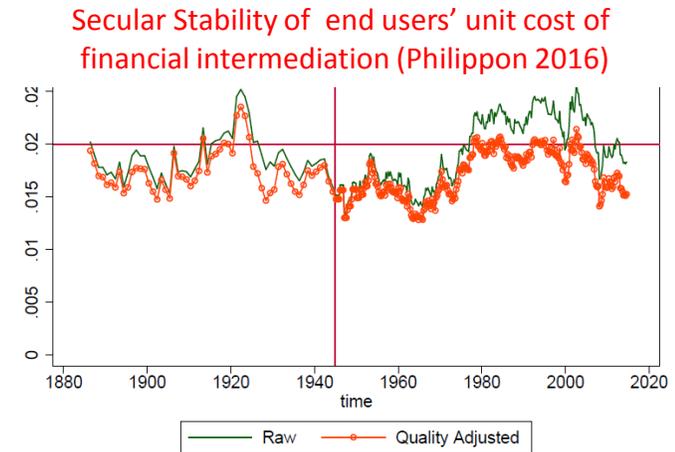
Regulating FinTech: Crowdfunding and Beyond by Guido Ferrarini

China's Path to FinTech Development by Xiao Xiang, Zhang Lina, Wang Yun and Huang Chengxuan

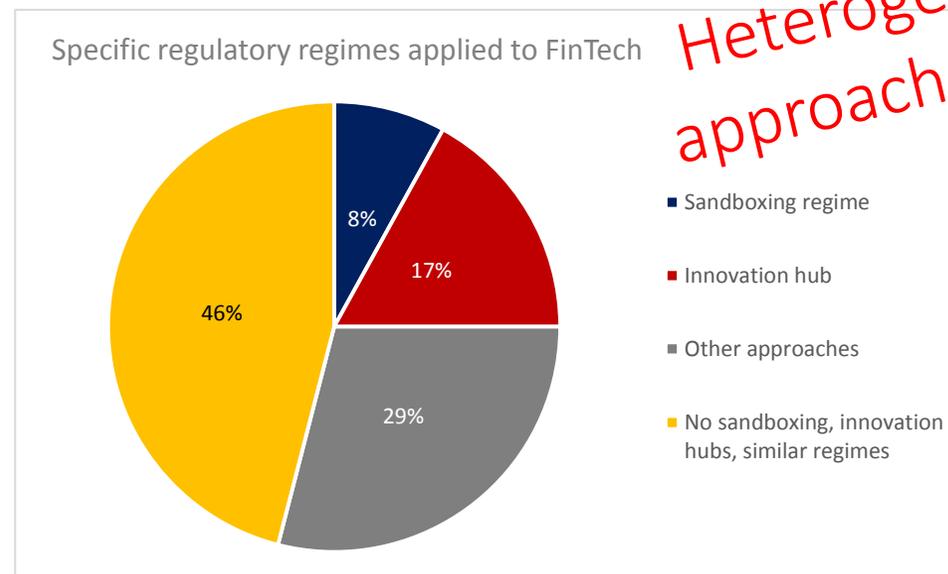
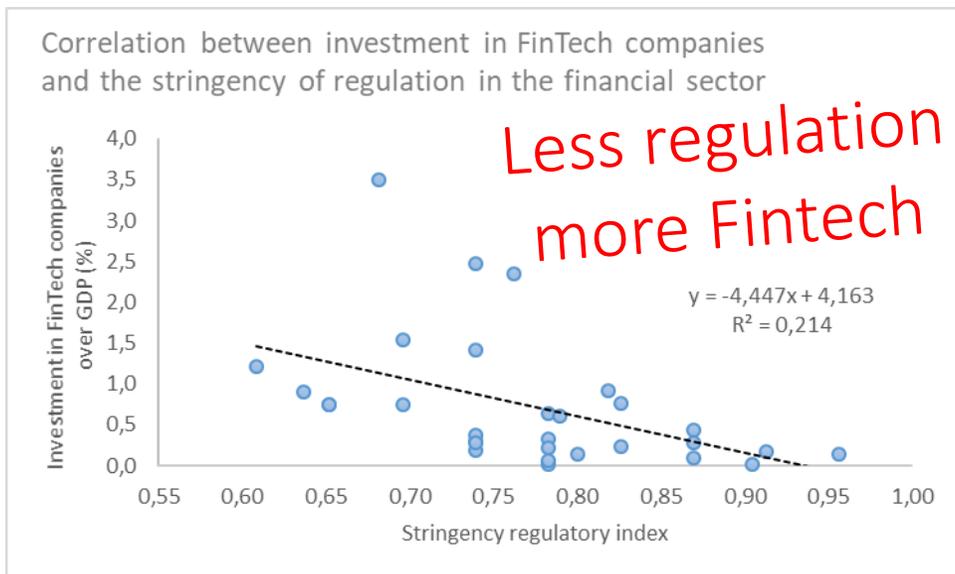


We agree on the bottom-line

- Innovation is great and neutral
 - Welcome to Technology applied to finance!
- Banks are multi-product (scope economies with bundling maturity transformation, information processing and payments)
 - These ingredients make direct competition for the banks' entire business difficult if not impossible for Fintechers
- However, there will [certainly] be:
 - Some competitive pressure
 - Some unbundling and dis-intermediation
- A risk if Fintechs remain in the shadow of shadow banking
 - Users awareness
- Regulation must play a key role:
 - Eliminate regulatory arbitrage: regulation by function and not by subject
 - Must level the playing field
 - Avoid chilling



Regulation and Fintech



Heterogeneous approaches (EU)

Regulation by function: Example on Crowdfunding platforms

- Banking regulation if platforms collect deposits and keep risk on their balance sheet
- Portfolio managers regulation if the platform has discretion in selecting potential borrowers
- Payment service regulation if platforms collect money without resorting to a third-party payment service provider
- Security regulation if platforms develop secondary markets for their products and issue tradable and non-tradable securities

Scenarios

- A possible scenario will be convergence, with
 - Banks (already) adopting new technologies
 - Fintech expanding their range of services
 - Regulators (hopefully) treating them equally for equal activities
- The real casualties will not be banking activities, but mostly small banks and some banking jobs
 - Already observed in the US: Buchak et al. (2017) rural and small commercial banks lose lending to peer-to-peer lending
- Fintechers effectively crunch vast amounts of hard information
 - Possible cherry picking of «simple» transparent borrowers similar to foreign banks entry
 - But the dirty work on soft-information will remain to banks («You can trust this entrepreneur»)
- At least as long as the distinction soft/hard information will resist Artificial Intelligence

AI and Machine Learning: need to know more!

- ML great at pattern recognition: started with image recognition
 - Since 2017 ML better predicts heart attacks than protocol of American College of Cardiology and American Heart Association
- Creditworthiness classification is pattern recognition!
 - We can expect many new applications in credit markets
 - Required investments to enter are less than expected
- But risks are not well understood, examples
 - Adversarial imaging: this appropriately manipulated picture is a rifle (99%) for top-notch image recognition ML software by Google
 - Can ML-algorithmic pricing learn to collude? Yes (Calzolari et al. 2018)



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THANK YOU

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