IESE Business School University of Navarra Banking Initiative

Digital Disruption in Banking

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EFA FinTech Panel

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Impact of digital disruption (I)

- Core functions of financial intermediation:
  - Maturity transformation and liquidity provision
  - Payment and transaction services
- Other:
  - Investment advising
- Information processing
  - Hard information on the rise (substitute for colateral)
  - Soft information (relationship banking)

Impact of digital disruption (II)

- Large in Asia, Africa with leapfrogging; more incipient in the West.
- Moves the sector to be customer-centered and platform-based.
- Leaves incumbents with obsolete technologies (e.g. rigid mainframes) and an overextended branch network while new generations want to bank with the mobile phone.
- The industry is facing a deep restructuring.

FinTech advantages & disadvantages

Advantage	Disadvantage
Superior technology free of legacy systems; leaner operation	Absence of an installed, loyal customer base
Friendly consumer interface and new standard of consumer experience	Limited access to soft information
Focus on activities/business segments with higher ROEs	Lack of reputation and brand recognition
More equity funding	High cost of capital
Able to attract best talent	Lack of regulatory and risk management experience and expertise. No access to the central bank backstop without a banking license

BigTech platforms have the advantages of fintechs with <u>none of the drawbacks</u> (plus superior data, network economies, technology, deep pocket, lobby power)→ potential more severe disruption for the traditional banking business.

Strategies: incumbents and fintechs

Incumbents' strategies (Discriminate by segment)	Fintechs' strategies
Accommodate ('fat-cat') • In the presence of high switching costs • To gain interchange fees paid to them by new service operators	Commit to remain small ('puppy-dog ploy') • No banking license • E.g. with P2P lending that serves unbanked segments of population → Form partnership
Fight, prevent entry (´top dog') • Shutdown/degrade access to infrastructure	Entry as a (licensed) digital bank • Less likely given the high compliance costs involved. → Consolidate or sell to incumbents
Launch their own fully online banks	

- Advantage of partnership
  - Incumbents benefit from IT knowledge and regulatory arbitrage.
  - Entrants experience lighter regulation, reach new customers, benefit from established brand, economies of scale and distribution channels of incumbents.

Strategies: incumbents and bigtechs

<table>
<tr><th>Incumbents</th><th>Bigtechs</th></tr>
<tr><td>Accommodate
• Cooperate with partnerships
• Provide specialized unique banking products and services</td><td>Accommodate
• Partnerships</td></tr>
<tr><td>Fight/Compete head-to-head by becoming platform/marketplace
• Profit from superior trust (?) from customers and data security
• Better regulatory navigation skills and similar lobby power than BigTech
• Cannot match bigtechs’ bundling/cross-subsidization strategy with complementary financial and non-financial products (despite enjoying some network effects)</td><td>Compete head-to-head
• Become banks/intermediaries bundling their offerings and exploiting economies of scope
    • Opt not to accept deposits to avoid regulation
• Multi-sided platform (marketplace)
    • Platform envelopment
    • Gatekeeper: Monopolize interface with customers</td></tr>
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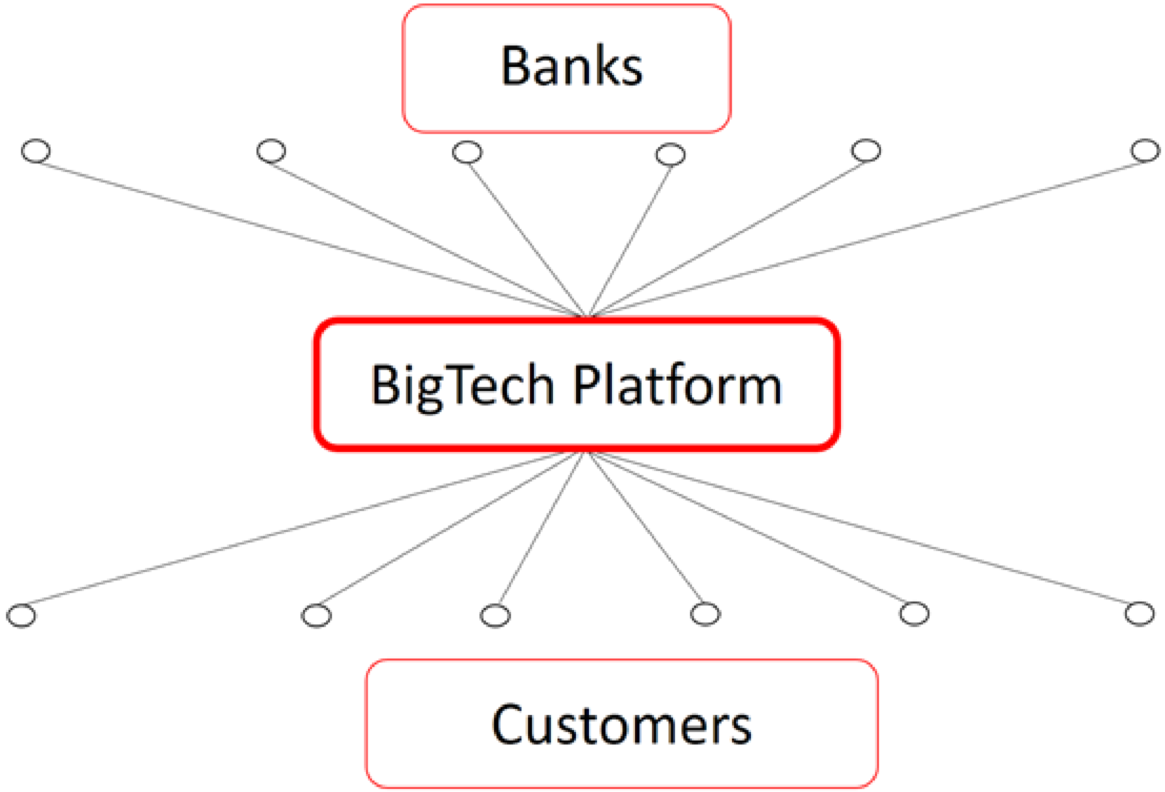
The future?



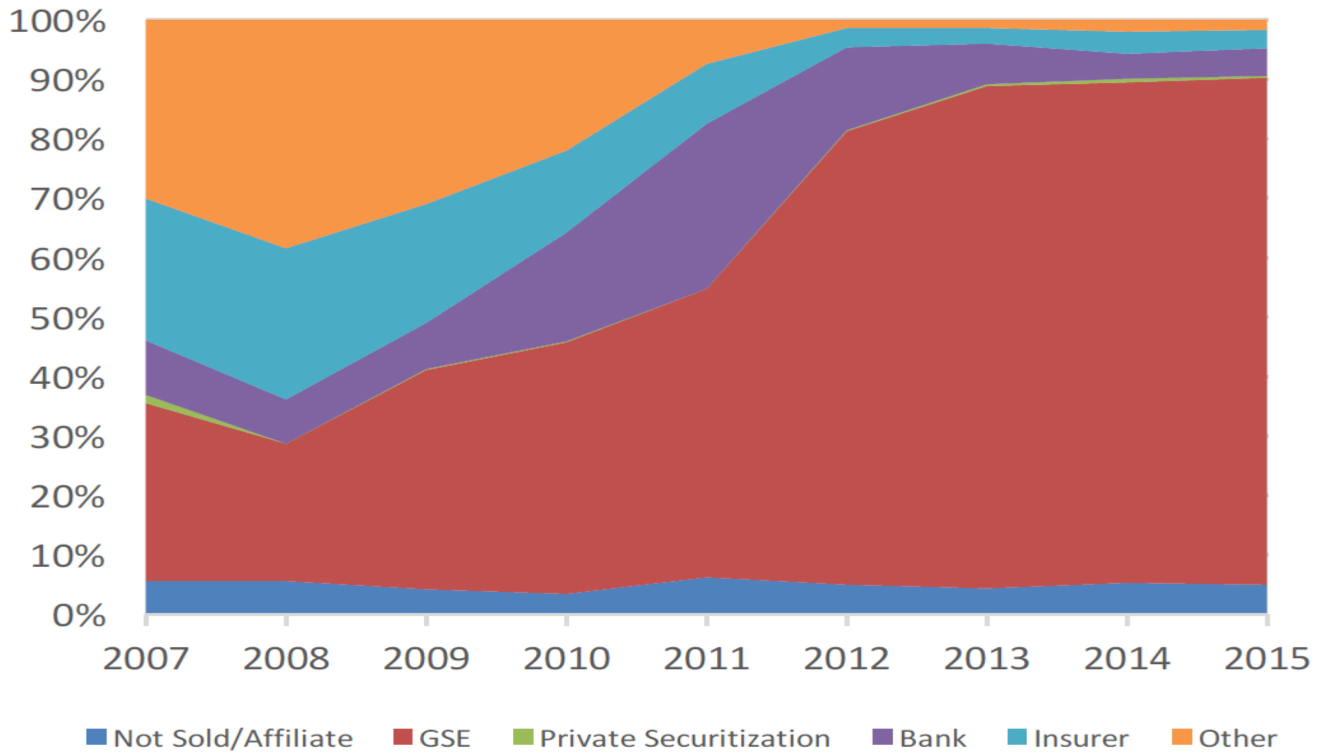
Scenarios

- First impact of digital disruption will
  - increase competition;
  - erode incumbents margins; and
  - increase competitive pressure and contestability.
- Incumbents will have to restructure:
  - The current overcapacity together with the need to invest heavily in information technology in a low profitability environment will lead to consolidation.
- Long run impact will depend on
  - extent of entry of BigTech (modulo regulation) and
  - whether a few bigtechs (perhaps including some platform-transformed incumbents) manage to monopolize the interface with customers and appropriate the rents in the business.

Regulation and financial stability (1)

- Level playing field?
  - "Open banking": asymmetry in information sharing requirements between PSD2 and GDPR.
  - Data ownership, portability and interoperability are key:
    - Tension between data portability and privacy
  - Different compliance burden for dominant players and small entrants (UK)?
  - Regulate activities but entities are those that fail.
- Heightened regulatory pressure fosters shadow banking (e.g. US with GSE guarantee).

Disposition of mortgage loans of shadow banks



Source: Fig. 4 in Buchak et al. (2017)

Regulation and financial stability (2)

- Increased competitive pressure decrease profits of incumbents and increases risk-taking.
- New sources of systemic risk:
    - Contamination of bank and non-bank activities in platforms.
    - Failure of third-party providers and cyberattacks.
- Consumer protection
    - Data privacy.
    - Price discrimination.
    - Transparency and behavioral biases.

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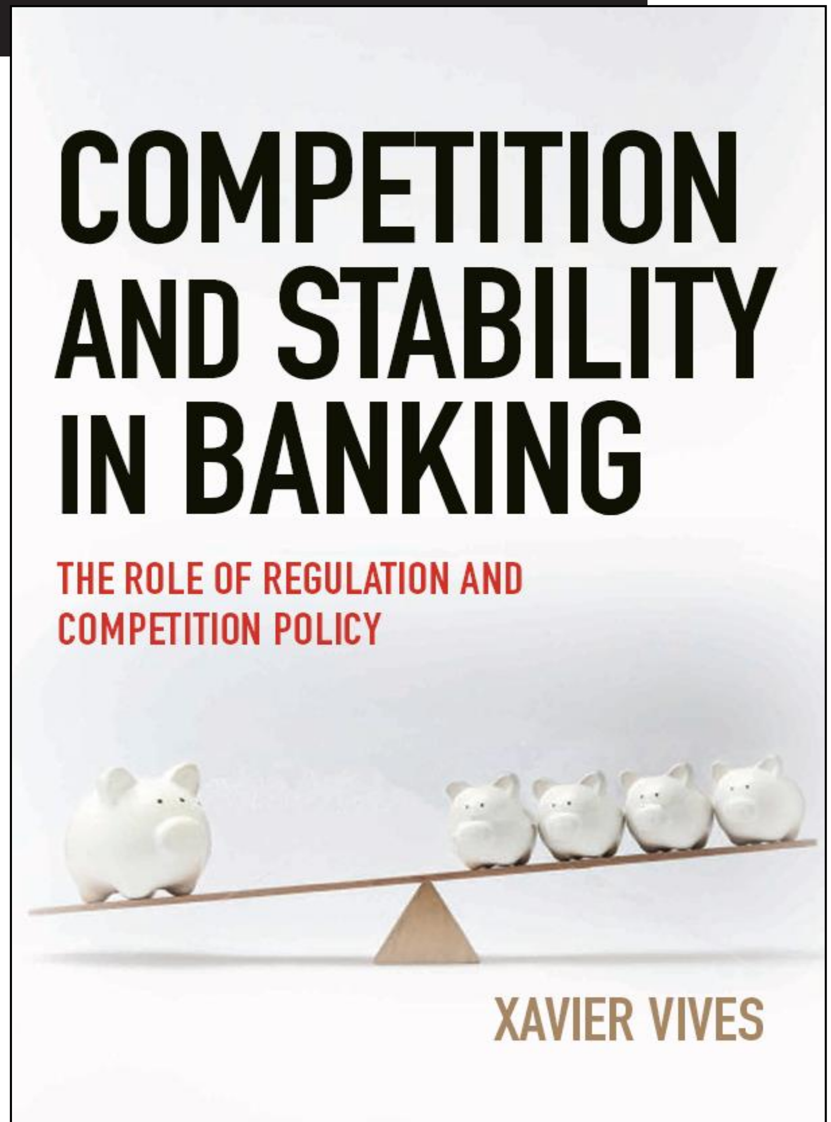

A question of balance

Other references

- "Digital Disruption in Banking", forthcoming at *The Annual Review of Financial Economics,* 2019.
- "Competition and Stability in Modern Banking: A post-Crisis Perspective", *International Journal of Industrial Organization*, 2019, 64, 55-69.
- http://blog.iese.edu/xvives/