Discussion of The Digital Banking Revolution: Effects on Competition and Stability

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POP QUIZ!

What is the most irresistible trend in banking today and for all time into the future?

Digitalization!

What is the most influential force on earth in economics, finance, and all other matters?

Competition!

What is the issue of greatest concern for banking, economics, and finance, and everything?

Stability!

What one paper encapsulates all these issues?

> The Digital Banking Revolution: Effects on Competition and Stability!

♦ I won't ask you what the best conference is – too easy to guess!



WOW! GREAT PAPER! ALMOST PERFECT!

The paper is thorough and checks all the boxes:

- > Most irresistible trend, most influential force, issue of greatest concern.
- Unique hand-collected dataset.
- Time period when digitization was in the formative phase, allowing for plausibly exogenous AT&T instrument.
- > Uses cross-sectional variation to remove time-series distractions.
- > Many results, all consistent, demonstrating robustness.
- > Multiple mechanisms explored.
- > Massive literature review, multiple literatures.
 - ✓ How the paper differs from/contributes to each.
 - ✓ Reference list goes onto the 10th page, single spaced.



"BIG PICTURE" VISION!

- The banking industry is really a cutting-edge technology industry, combining information technologies and financial technologies to change the future of the financial industry as well as the real economy.
 - We get a look at a substantial piece of this "BIG PICTURE" in this paper by seeing how the digital revolution affects bank competition and financial stability.
 - ≻ WOW!



MORE "BIG PICTURE" VISION!

- We know what the future will bring more digitalization, more mobile banking, fewer branches, etc.
 - Economically advanced nations such as the Netherlands and Nordic nations have gone almost branchless already.
 - Developing nations that never had significant financial infrastructure are "jumping over" this deficiency and going right to digital banking.
 - We get a glimpse into how that transition to the digital future plays out more slowly here in the US to give us a better perspective on the effects.
 - > WOW!



EVEN MORE "BIG PICTURE" VISION!

- Future digital competition is both multinational and multi-industry.
 - Banks will compete with other banks from around the globe offering branchless mobile services in different currencies, with different specialties, etc., including in nations that do not even have their own banks.
 - Banks will also compete with mobile apps from Digital Financial Firms (DFFs) of several types, FinTech, BigTech, and DeFi, that combine nonfinancial digital innovations with financial innovations in different ways, including cryptocurrencies.
 - We know the competition is coming but not the implications for society good, bad, or otherwise.
 - We get a glimpse into that future by seeing the effects of past digitalization and cautiously extrapolating into the future to see what we should prepare for as research economists and policy makers.
 WOW!



ONLY ONE SUGGESTION FOR IMPROVEMENT

LESS IS MORE!!

- > The paper is WAY TOO LONG in almost every dimension.
- Change this from a great dissertation into a lean, mean, publishing machine, which is required after graduation!
- > The author knows this, of course, and is already working on it.
- My suggestions really concern <u>how</u> to do it based on bumps and bruises after decades with hundreds of rejections, failures, and humiliations.



Add no new theories, no new data sets, no new tests, no new tables, no new instruments, no new mechanisms, no new literatures to review – less of everything!

> Cut back to reveal the most important contributions, delete the rest.

- I will make further suggestions on what to do.
 - ✓ Substitute better material for some of the deletions.
 - ✓ Use other deletions to make better future papers.
 - Make these papers "sing" a little better with more context, vision, and future implications.
- > If I spoke French, I would say add that "je ne sais quoi!"



- No need for so many papers in the excessive reference list and no need for the discussions of the many literatures and how the analysis in this paper is preferred to those.
 - > Say what you do and that it complements the research of others.
 - > Stick to your main strengths, no need to fight many others.
 - ✓ Your referees will likely be the authors of these papers.



- Use existing survey papers on competition and other topics to summarize literatures for you so you do not have to summarize or reference as many of them.
 - I have sent the author three survey papers on bank competition.



Replace some of the lengthy motivation and excessive references to the literature with more enhancement of the "BIG PICTURE" VISIONS noted above using fewer references.

Let the other papers from the literature carry the load to motivate your paper!

Examples to follow.



VISION MOTIVATION EXAMPLE A

- Banks were the most IT-intensive industry in the US, measured by ratio of computer equipment/software to value added before mobile banking.
 - Led to consumer benefits, improved quality and variety of banking services, and consolidation of the industry, similar to some of the effects of mobile banking in this paper.
 - Berger, A. N. (2003). The economic effects of technological progress: Evidence from the banking industry. *Journal of Money, Credit and Banking*, 141-176.



VISION MOTIVATION EXAMPLE B

- Exogenous shocks from another new lending technology small business credit scoring in the 1990s – were employed in a similar fashion to the rollout of mobile banking in the 2000s in this paper, also affecting bank lending.
 - Berger, A. N., Espinosa-Vega, M. A., Frame, W. S., & Miller, N. H. (2005). Debt maturity, risk, and asymmetric information. *The Journal of Finance*, 60(6), 2895-2923.



VISION MOTIVATION EXAMPLE C

- There is a guide on how to improve competition research for financial intermediation services, particularly for dynamic competition issues of innovations.
 - Mobile banking and competition with Digital Financial Firms (DFFs) that are usually not financial intermediaries, are front and center.
 - Berger, A. N., & Boot, A. W. (forthcoming). Financial Intermediation Services and Competition Analyses: Review and Paths Forward for Improvement. *Journal of Financial Intermediation*, 101072.



- Eliminate the stability analysis, essentially half of the paper.
 It is not as strong as the competition analysis, which can stand on its own well.
- The stability analysis in the paper market shares, uninsured deposits ratios, and credit risks of small loans by mid-sized banks – may not sell well to journal editors and referees considering stability.



ELIMINATE THE STABILITY ANALYSIS (CONT)

- Stability research is more frequently associated with systemic risks from banks that are too-big-to-fail (TBTF), such as SIFIs, G-SIBs, and other very large financial institutions.
 - Mid-sized banks are usually considered only if they are shown to be too-interconnected-to-fail (TITF) and/or too-many-to-fail (TMTF).



ELIMINATE THE STABILITY ANALYSIS (CONT)

- The more commonly used measures of systemic risks such as SRISK, SES, CoVaR, and others, are often calculated using stock market prices of the banks and other financial institutions.
 - Usually measured by V-Lab at NYU.
 - Berger, A. N., & Sedunov, J. (forthcoming). The Life Cycle of Systemic Risk and Crises. *Journal of Money, Credit, and Banking*.



- Reformulate the analyses you exclude from the paper into future papers that are even better.
- I offer an example here of how to reformulate the (deleted) stability analysis.



DIFFERENT WAY TO ANALYZE SYSTEMIC RISK

- There is a different type of systemic risk more appropriate to consider with mobile banking issues, and the author may be able to do it.
- It concerns that future "BIG PICTURE" VISION issue of systemic risks from future digital competition between banks and Digital Financial Firms (DFFs) of FinTech, BigTech, and DeFi.
 - DFFs may outcompete the banks in the future, leaving them too weak to respond to issues such as the need for relationship banking during crises that DFFs do not provide.
 - These issues are laid out in Berger and Boot (JFI forthcoming), but that paper is conceptual and this has not yet been applied to the data.



ONE FINAL GRADUATION WISH FOR NAZ!

 May you suffer many bumps and bruises over decades with hundreds of rejections, failures, and humiliations ahead!
 You should have many opportunities to learn and improve!



Thanks to Professors Levine and Haber For the Opportunity!

