Social Media as a Bank Run Catalyst

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Overview

- Research question: What is X's role in bank runs?
- Find that:
  - Banks in the top tercile of pre-run Twitter exposure lost 6.6 PPs more in stock market value
  - During the run period, high X volume predicts hourly stock market losses, especially for banks with high balance sheet risk
  - Using higher frequency data: Find immediate stock market losses
  - The effect is stronger for tweets with contagion keywords and tweets by tech startup users who are likely depositors in SVB

Bank Runs

- Vast literature on financial fragility created by bank runs going back to Diamond and Dybvig (1983)
- Implication for financial stability (Angeletos and Werning (2006), Goldstein et al.(2020), Goldstein et al. (2005), Liu (2018), Peck and Shell (2003), Brunnermeier (2009), Zhiguo and Xiong (2012),Kiss et al. (2012), Acharya and Yorulmazer (2008), Allen and Gale (2000) among others)

Bank Runs

Bank Runs 1930s:

SVB Bank Run 2023:

Bank Runs

Bank Runs 1930s:

SVB Bank Run 2023:

Differences:

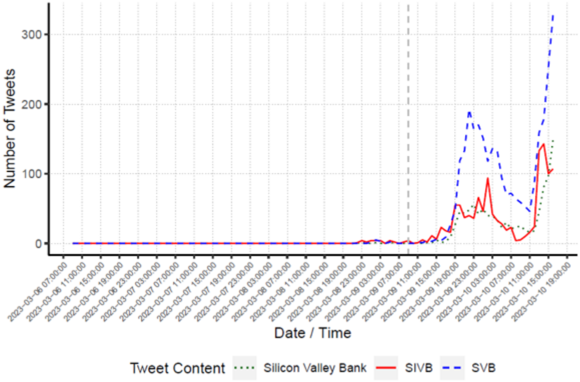
1. Ease with which its customers could execute withdrawals (Drechsler et al.(2023), Jiang et al.(2022), Fuster et al.(2019), Benmelech et al.(2023))
2. The speed with which news is spread, including misinformation (Ro'ee Levy (2022, 2020), Cookson et al. (2022), Pedersen (2022))

- Uniqueness of SVB: tech-focused customer base, with above the max FDIC insured amount of $250k
- Suitable settings to study the effect of X on the "new" bank run, but how much can we learn from it on future crises?

Who Tweeted about SVB?

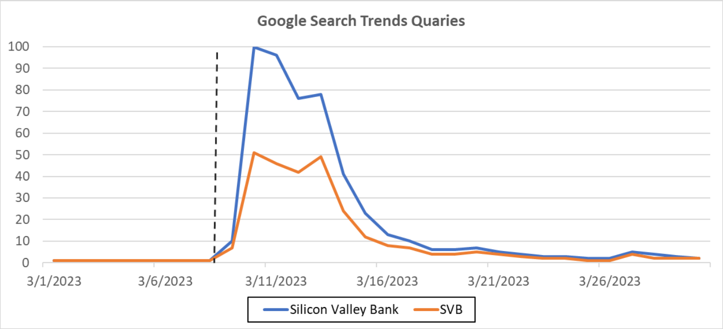
Figure 2: Startup Community Tweets about Silicon Valley Bank

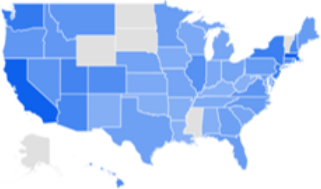
Twitter Startup Community users post mostly general discussion tweets, which start distinctly after the initial wave of tweets.



- Startup community tweets spike distinctly after the initial increase in tweet volume, and they are more likely to mention SVB than SIVB

Who Tweeted about SVB?





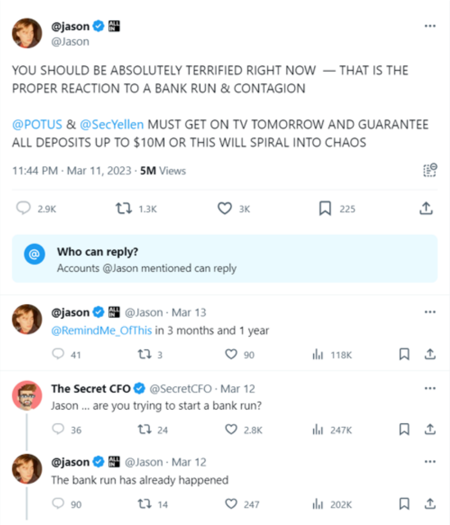
Selection on the Users

- The authors track conversations about SVB's ticker "SIVB" to distinguish investor-contributed tweets from general conversation
- What do we know about those "influencers"? Professional investors?
- What do we know about their followers?
- Do we know how many SVB consumers are using Twitter? Following those influencers?
- Top tercile Twitter preexposure is associated with a 6.6 PPs more stock losses (compared to sd increase in % uninsured deposits is associated with 4.1 PPs loss)
- Are Twitter users representing the average SVB consumer?
- If so, should we assume that they have access to the same information? (peer pressure)
- If so, how should we think that the 6.6 PPs should adjust
- Other social media platforms

Selection on the Banks

- Data includes around 300 banks
- Less than half of all public banks
- What do we know about those banks?
- What about private banks?
- Geographical distribution

Non-Linearity in Twitts - Jason Calacanis et al Tweets



Can we think about a few high-profile entrepreneurs who sounded the alarm that spread on social media?

Mechanism

- Social media amplifies classical bank run risk factors

The Observer
Silicon Valley Bank

'The first Twitter-fuelled bank run': how social media compounded SVB's collapse

The speed at which Silicon Valley Bank collapsed has left experts questioning whether social media has opened up entirely new risks in the world of finance

Figure 1: The Guardian, March 16

- Potential mechanism: transfer of knowledge more quickly to more people, or creating panic and fake news
- Repeated games: learning and adaptation to fake news

An Indicator for Financial (in)Stability

- This paper investigates social media's role in the bank run, and assuming that it is relevant for future crises, can we use this method to predict the next crisis?
- How is it compared to other indicators of stress?
- Is this methodology limited to a specific time frame pre-crisis? How much time ex-ante?
- SVB's failure was preceded by a flurry of Twitter activity by apparent depositors who openly used words like "withdraw" in their tweets - *are there any specific terms that would help us to identify the next crisis?*

Overall

- A personal takeaway: limiting time invested in reading *The New York Times* and be more active over X
- This paper:
  - Very timely: 167 papers with "Silicon Valley Bank" in their title, 50 NBER papers
  - Very timely #2: First draft less than a month after the event
  - Great use of AMAZING data to tackle important questions
  - Interesting results at both research and policy aspects

Comments

- Sample selection
- Mechanism
- Financial stability implications

Thank you, and good luck with the paper!